

ANGELES LINK PHASE 1 GREENHOUSE GAS (GHG) EMISSIONS EVALUATION FINAL REPORT – DECEMBER 2024

SoCalGas commissioned this GHG Emissions Evaluation from Stantec Consulting Services Inc. The analysis was conducted, and this report was prepared, collaboratively.

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Acronyms and Abbreviations

AB Assembly Bill

APCD Air Pollution Control District

AQMD Air Quality Management District

AR6 IPCC Sixth Assessment Report

CEQA California Environmental Quality Act

CAAP Clean Air Action Plan

CARB California Air Resources Board

CBOSG Community Based Stakeholder Organization Group

CEC California Energy Commission

CFR Code of Federal Regulations

CH₄ Methane

CHC Commercial Harbor Craft

CHE Cargo Handling Equipment

CO₂ Carbon Dioxide

CO₂e Carbon dioxide equivalent

CPUC California Public Utilities Commission

DOE Department of Energy

EDF Environmental Defense Fund

EF Emission Factor

FARMER Funding Agricultural Replacement Measures for Emission

Reductions

GHG Greenhouse Gas

GREET Greenhouse Gases, Regulated Emissions, and Energy Use in

Transportation

GSE Ground Support Equipment

GWP Global Warming Potential

H₂ Hydrogen

HDV Heavy-duty vehicle

IPCC Intergovernmental Panel on Climate change

Kg Kilogram

MDV Medium-duty vehicle

MJ Megajoules

MMBtu Million British Thermal Units

MMscf Million standard cubic feet

MMTPY Million Metric Tonnes per Year

NEPA National Environmental Policy Act

N₂O Nitrous Oxide

NETL National Energy Technology Lab

NREL National Renewable Energy Lab

O₂ Oxygen

OP Ordering Paragraph

PAG Planning Advisory Group

PNNL Pacific Northwest National Laboratory

psi Pounds per square inch

RNG Renewable Natural Gas

SB Senate Bill

SMR Steam Methane Reforming

South Coast Air Quality Management District AQMD

UC University of California

UCI University of California Irvine

DOE Department of Energy

EPA Environmental Protection Agency

ZECAP Zero Emissions for California Ports

ZEV Zero Emission Vehicle

ZEAT Zero Emission Advanced Technology

1 EXECUTIVE SUMMARY

Southern California Gas Company (SoCalGas) is proposing to develop a clean renewable hydrogen pipeline system to facilitate transportation of clean renewable hydrogen from multiple regional third-party production sources and storage sites to various delivery points and end users in Central and Southern California, including in the Los Angeles Basin. The CPUC's Phase 1 Decision, approving the Memorandum Account for SoCalGas's proposed Angeles Link, allows SoCalGas to track costs for conducting the feasibility studies. In the Decision, the CPUC defines clean renewable hydrogen as hydrogen that does not exceed 4 kilograms of carbon dioxide equivalent (CO2e) on a lifecycle basis per kilogram of hydrogen produced and does not use fossil fuel³ in the hydrogen production process.

This greenhouse gas (GHG) study (GHG Study or Study) is one of the studies established to answer questions raised by the CPUC and other parties to the proceeding. The Decision directs (OP 6 (n)) SoCalGas to provide the findings demonstrating compliance with environmental laws and public policies. To demonstrate how clean renewable hydrogen could support environmental laws and public policies, this Study conducts an initial evaluation of projected GHG emissions from hydrogen infrastructure including those attributable to third-party production and third-party storage; and of anticipated GHG emission reductions from end-users; and overall GHG benefits associated with Angeles Link. This feasibility study is based on information currently available, and the analysis and corresponding conclusions are expected to evolve over time.

This GHG Study evaluates direct GHG emissions4 associated with hydrogen combustion associated with new infrastructure (i.e., third-party production, third-party storage, and

¹ In the California Public Utilities Commission (CPUC)'s Angeles Link Phase 1 Decision 22-12-055 (Phase 1 Decision), clean renewable hydrogen refers to hydrogen that does not exceed 4 kilograms of carbon dioxide equivalent (CO2e) produced on a lifecycle basis per kilogram of hydrogen produced and does not use fossil fuels in the hydrogen production process.

² California Public Utilities Commission (CPUC), 2022, Adopted Decision 22-12-055 - Decision Approving the Angeles Link Memorandum Account to Record Phase One Costs, December 15,

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M500/K167/500167327.PDF

³ Fossil fuel is defined as a mixture of hydrocarbons including coal, petroleum, or natural gas, occurring in and extracted from underground deposits.

⁴ In this Study, direct GHG emissions refer to GHG emissions from combustion, and indirect GHG emissions refer to GHG associated with non-renewable grid electricity or the estimated effect of potential hydrogen leakage on greenhouse gases in the atmosphere.

transmission of hydrogen),⁵ as well as GHG emissions reductions associated with displaced fossil fuels by end users in the mobility, power generation, and hard-to-electrify industrial sectors.⁶ Indirect GHGs from electricity are zero since it was assumed that only renewable electricity could be used to produce hydrogen that complies with CPUC's definition of clean renewable hydrogen. Should the need arise for the use of non-renewable grid electricity to produce hydrogen, the associated GHG emissions associated with production would include non-zero indirect GHGs. The GHG emissions associated with water procurement, water conveyance, and water treatment for production of hydrogen were not included in the scope of this Study.⁷ Similarly, GHG emissions associated with transportation of other materials such as biomass to the production site or biomass feed preparation are beyond the scope of this feasibility study.

SoCalGas will not be producing clean renewable hydrogen as part of Angeles Link, and it is anticipated that third-party producers would complete thorough environmental review of their projects when proposed pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), as applicable, and that review would evaluate the potential GHG emissions associated with that production.

Projected quantities of displacement of diesel and gasoline by hydrogen fuel cells in the mobility sector; and anticipated replacement of natural gas with hydrogen in the power generation and hard-to-electrify industrial sectors were based on estimated demand values provided by the parallel Demand Study.

The potential climate considerations of hydrogen leakage, the potential for which was evaluated in the parallel Leakage Study Report, for both general hydrogen infrastructure and Angeles Link infrastructure, are also discussed. Specifically, a preliminary high-level estimate of the impacts to predicted overall (end user reductions minus infrastructure emissions) GHG reductions (using GWP 100) was conducted. Additionally, a summary of the range of estimated global warming potentials (GWP) of hydrogen found in the literature is provided for both the 20 and 100 year time horizons, that would be considered

⁵ The terms "new infrastructure" and "hydrogen infrastructure" refer to general hydrogen infrastructure comprised of third-party production, third-party storage, and transmission. The term "Angeles Link infrastructure" refers to transmission via pipelines including compression which supports both storage and transmission of hydrogen.

⁶ Mobility, power generation, and hard-to-electrify industrial sectors as defined in the parallel Demand Study.

⁷ The GHG emissions associated with water conveyance for production of hydrogen were also outside the scope of the parallel Angeles Link Phase 1 Water Resources Evaluation due to the variety of potential water supply sources and unknown final selection of sources third-party producers may pursue to produce clean renewable hydrogen. In response to stakeholder feedback on potential GHG emissions associated with water supply development, the Water Resources Evaluation added a supplemental desktop analysis of potential GHG emissions associated with water supply treatment and conveyance and that analysis is now included as part of that separate study.

for hydrogen as an indirect GHG.⁸ Evaluation of methane leakage in the hydrogen industry is outside the scope of this feasibility analysis.

The Demand Study, which was relied upon when estimating initial projected GHG emissions, projected economy wide demand by 2045 in SoCalGas's service territory using three scenarios: conservative demand, moderate demand, and ambitious demand. In comparison to the Demand Study values noted above, the projected throughput of Angeles Link, which is expected to support a portion of that demand, is estimated to range from approximately 0.5 to 1.5 million metric tonnes per year (MMTPY). The low, medium, and high throughput scenarios for the Angeles Link buildout (0.5 MMTPY, 1.0 MMTPY, and 1.5 MMTPY) align with the conservative, moderate, and ambitious demand scenarios (1.9 MMTPY, 3.2 MMTPY, and 5.9 MMTPY)

To estimate potential GHG emissions associated with the Project, including those from third-party production and storage and end users, GHG estimates were calculated using initial estimates from the Demand Study. Then the ratio of anticipated hydrogen throughput values for Angeles Link to the projected values in the Demand Study were calculated for each of the conservative (26.85%), moderate (31.12%), and ambitious (25.36%) scenarios. The ratios were applied to the GHG estimated emissions using the Demand Study Scenarios to estimate potential GHG emission reductions associated with Angeles Link Throughput Scenarios. This analysis is shown in Table ES-1 below.

Direct G	Table ES-1 Direct GHG Reduction Estimates for Demand Study Scenarios Applied to Projected Angeles Link Throughput Scenarios					
Scenario	Total Projected Hydrogen Demand (MMTPY) Overall GHG Reductions for Demand in 2045 (MMTPY)		Angeles Link Projected Hydrogen Throughput (MMTPY)	Overall GHG Reductions for Angeles Link Throughput in 2045 (MMTPY)		
Low	1.9	16.7	0.5	4.5		
Medium	3.2	24.9	1	7.8		
High	5.9	35.7	1.5	9.0		

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⁸ The estimated effect of potential hydrogen leakage as an indirect GHG is discussed in Section 9 of this document.

Key Findings: Demand Scenarios

The key findings for GHG emission reductions based on the Demand Study Scenarios are as follows and are discussed further herein.

- Projected up to nearly 17 and 36 million metric tons of CO₂e per year removed from SoCalGas geographic service territory by end users by 2045 in conservative and ambitious demand scenarios of the Demand Study, respectively. The reductions are equivalent to the annual GHG emissions of approximately 45 and 96 natural gas fueled power plants, respectively per EPA Calculator.
 - Mobility sector comprises 72.5% and 50.3% of overall GHG reductions based on the conservative and ambitious demand scenarios, respectively. The GHG reductions estimated for the conservative and ambitious demand scenarios in 2045 are equivalent to removing approximately 2.7 million and 4.3 million gasoline passenger vehicles off the roads per year, respectively.
 - Power generation and hard to electrify industrial sectors comprise 41.7% and 8.1% of the overall GHG reductions, respectively, based on the ambitious demand scenario.
 - Power generation and hard to electrify industrial sectors comprise 23.6% and 3.9% of overall GHG reductions, respectively, based on the conservative demand scenario.
 - Infrastructure GHG emissions are projected to be negligible when compared to overall emission reductions, at 0.29% and 0.25% of end-user reductions for conservative and ambitious demand scenarios, respectively.

Key Findings: Angeles Link Throughput Scenarios

The key findings for GHG emission reductions for Angeles Link Throughput Scenarios, which accounts for emissions from not just transmission of hydrogen, but also from third-party production and storage as well as end users, are as follows and are discussed further herein.

- Projected about 4.5 and 9 MMT of CO2e per year removed from SoCalGas's geographic territory by end users by 2045 in Angeles Link Low and High Throughput Scenarios, respectively.
- Mobility sector comprises 72.5% and 50.3% of overall GHG reductions based on the Angeles Link Low and High Throughput value scenarios, respectively. The GHG reductions estimated for the Low and High Throughput Scenarios in 2045 are equivalent to 725,000 and more than 1 million gasoline passenger vehicles driven for one year, respectively.⁹

⁹ EPA, 2023a, Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results

- Power generation and hard to electrify industrial sectors comprise 41.7% and 8.1% of overall GHG emission reductions, respectively, based on the High Throughput Scenario.
- Power generation and hard to electrify industrial sectors comprise 23.6% and 3.9% of overall GHG emission reductions, respectively, based on the Low Throughput Scenario.
- Infrastructure GHG emissions are projected to be negligible when compared to overall emission reductions at 0.29% and 0.25% of end-user reductions for Low and High Throughput Scenarios, respectively.

Additional details related to both the Demand Scenarios and Angeles Link Throughput Scenarios are provided below.

2030 Ambitious Demand Scenario: In 2030, the Ambitious Demand Scenario predicts a reduction of about 6 MMTPY of CO2e due to hydrogen replacing fossil fuels. This reduction includes the emissions from producing, storing, and transmitting hydrogen. This amount of reduction is comparable to the energy use of about 740,000 homes for one year, according to the EPA's GHG calculator. In terms of specific contributions, Angeles Link is expected to meet about 25% of the projected hydrogen demand identified in the Demand Study. This means that the specific GHG reductions attributed to Angeles Link under the High Throughput Scenario are estimated at about 1.45 million MT CO2e per year, which is equivalent to the energy use of approximately 189,000 homes for one year.

2045 Ambitious Demand Scenario: In 2045, the scenario estimates an overall reduction in CO2e emissions of about 36 MMTPY, again due to the displacement of fossil fuels by hydrogen. These reductions are equivalent to the annual electricity usage of over 4.6 million homes, as per the EPA's calculator. Angeles Link is expected to supply the same percentage (about 25%) of the total hydrogen demand in SoCalGas service territory, as projected in the Ambitious Demand Scenario. As a result, the GHG emissions reductions specifically associated with Angeles Link in the High Throughput Scenario for 2045 are estimated at about 9.0 million MT CO2e per year. This would correspond to the energy use of roughly 1.1 million homes for one year.

Mobility Sector: In the Mobility sector, the estimated CO2e reductions under the Ambitious Demand Scenario are approximately 4.4 million MT in 2030 and about 18 million MT by 2045. The reductions by 2045 are equivalent to the emissions from around 4.3 million gasoline-powered passenger vehicles driven for a year. The sector accounts for between 50% to 83% of total GHG emissions reductions, varying by scenario and year. The largest contributors are heavy-duty vehicles (55.5% in 2030 and 62.8% in 2045), followed by buses (33.6% in 2030 and 22.0% in 2045), and medium-duty vehicles (7.3% in 2030 and 9.7% in 2045). Reductions from on-road vehicles outweigh those from off-road vehicles, mainly due to the higher displacement of fossil fuels. In the High

¹⁰ EPA, 2023a, GHG Calculator, Ibid.

Throughput Scenario, the reductions for 2030 are about 1.1 million MT CO2e per year, increasing to about 4.6 million MT CO2e by 2045. The 2045 reductions would be equivalent to the emissions from 1 million gasoline-powered vehicles driven for a year.

Power Generation Sector: In the Power Generation sector, it's projected that by 2030, there could be a reduction of 0.16 million MT of CO2e under the Ambitious Demand Scenario, and by 2045, this could increase to about 15 million MT CO2e. Over 78% of these reductions are expected from the peaker and baseload plant sub-sectors in all years under this scenario with the remaining reductions attributable to the cogeneration sub-sector. By 2045, these reductions are equivalent to the yearly electricity consumption of approximately 1.9 million homes, according to the EPA's calculator. Under the High Throughput Scenario, the reductions are estimated at about 41,000 MT CO2e per year for 2030 and about 3.8 million MT CO2e per year by 2045. The reductions for 2045 under this scenario are comparable to the energy use of around 480,000 homes for one year.

Hard to Electrify Industrial Sectors: In the industrial sectors that are difficult to electrify, the estimated CO2e reductions under the Ambitious Demand Scenario are around 1.1 million MT in 2030 and could rise to about 2.9 million MT by 2045. The 2045 reductions would be equal to the annual electricity usage of about 365,000 homes. In this scenario, refineries are the largest contributors, accounting for 65.5% of reductions in 2030, followed by the Food and Beverage sector (13.4%), Stone, Glass, and Cement (12.1%), and Metals (5.3%). Please note that refineries are only considered in the Ambitious Demand Scenario and refineries comprise about one-quarter of the Demand in this scenario. These percentages remain consistent from 2030 to 2045. In the High Throughput Scenario, the reductions are estimated at about 290,000 MT CO2e per year for 2030 and about 730,000 MT CO2e per year by 2045. The 2045 reductions equate to the energy use of around 96,000 homes for one year.

Hydrogen Infrastructure Emissions: Emissions associated with new hydrogen infrastructure are evaluated. The results of the conservative estimate prepared represent a small fraction of the emissions reductions achieved by end-users adopting hydrogen in the study region.

Specifically, in the Ambitious Demand Scenario:

- By 2030, emissions from the new hydrogen infrastructure are estimated at about 16,600 MT of CO2e per year. This accounts for 0.29% of total CO2e reductions expected from end-users based on hydrogen usage projections.
- By 2045, these emissions increase to about 87,900 MT per year of CO2e, which constitutes 0.25% of the total CO2e reductions from end-users. This accounts for 0.25% of total CO2e reductions expected from end-users based on hydrogen usage projections.

For Angeles Link, under the High Throughput Scenario:

- In 2030, the estimated emissions attributed to the new infrastructure are estimated to be around 4,200 MT of CO2e per year. This accounts for 0.29% of total CO2e reductions expected from end-users based on hydrogen usage projections.
- By 2045, this figure is projected to rise to 22,300 MT of CO2e per year. This
 accounts for 0.25% of total CO2e reductions expected from end-users based on
 hydrogen usage projections.

Stakeholder Input

The input and feedback from stakeholders including the Planning Advisory Group (PAG) and Community Based Organization Stakeholder Group (CBOSG) has been helpful to the development of this Final GHG Study Report. For example, in response to stakeholder comments, the Study includes an estimate of the impact to estimated GHG reductions of a preliminary high-level volumetric estimate of the potential for leakage from hydrogen infrastructure from the Leakage Study Report, as well as presenting a summary of the estimated Global Warming Potential (GWP) 100 and GWP 20 for hydrogen available in the literature. In addition, the study includes a review of relevant literature provided by stakeholders, as applicable. The feedback that has been received related to this Study is provided in Section 11.



About the Research

Understanding the Draft Study



Study Purpose

- Estimate GHG combustion emissions associated with Angeles Link infrastructure including third party production and third party storage.
- Assess projected GHG combustion emission reductions from displacing fossil fuels with hydrogen in various end user sectors.



Scope

- Focus on direct combustion GHG emissions from hydrogen infrastructure and reductions from fossil fuel displacement.
- Includes examination of indirect climate impacts for potential hydrogen leakage associated with infrastructure based on a summary of leakage rates provided in the Leakage Study.



Key Assumptions

- Use of renewable electricity for hydrogen production to ensure zero GHG emissions from the energy supply side.
- Anticipation of technological efficiencies and market adoption rates to project climate benefits.



Limitations

- Does not account for water conveyance and biomass transportation impacts and other potential contributors to full lifecycle GHG assessments.
- Acknowledges the draft nature of the study, indicating ongoing refinement of data and conclusions.



Informed by Research

- Literature and Studies: Equity Principles for Hydrogen, AC Transit, 2022. Bertagni et al., 2022, CARB 2022; Ocko, I. and S. Hamburg, 2023; Paulot, F., et al., 2021; Sand, M., et al., 2023, Sun, Tianyi, et al., 2024
- Notable references include detailed discussions on the impact of hydrogen leakage on overall GHG reductions and climate impacts.

Understanding the Impact of Angeles Link

Identifying End-Users Served by Angeles Link



Mobility Sector

 Heavy-Duty Trucks, Medium-Duty Vehicles, Buses, Agriculture, Construction & Mining Equipment, Cargo Handling Equipment, Ground Support Equipment, Commercial Harbor Craft.



Power Generation Sector

Turbines and Co-generation.



Hard-to-Electrify Industries

• Chemical Manufacturing, Metal Refining and Treatment, Stone/Glass/Cement, Food & Beverage, Paper & Pulp, Aerospace, Refineries.

Overview of Direct GHG Reduction Estimates for Demand Study Scenarios Applied to Projected Angeles Link Throughput Scenarios

- **Demand Scenarios**: Specifies the level of market adoption (Low, Moderate, High) for hydrogen by end users.
- Total Projected Hydrogen Demand: This is how much hydrogen is expected to be used in each scenario.
- Overall GHG Reductions based on Demand Scenarios in 2045: This shows the estimated GHG reductions associated with Demand Scenarios.
- Angeles Link Projected Hydrogen: It reflects the specific contribution of Angeles Link within the larger market context.
- Overall GHG Reductions based on Throughput Scenarios in 2045: This represents the total anticipated GHG reduction in 2045, reflecting Angeles Link contribution.

DEMAND SCENARIO	TOTAL PROJECTED HYDROGEN DEMAND (MMT/YR)	OVERALL GHG REDUCTIONS BASED ON DEMAND SCENARIOS IN 2045	ANGELES LINK PROJECTED HYDROGEN (MMT/YR)	OVERALL GHG REDUCTIONS FOR ANGELES LINK THROUGHPUT IN 2045
CONSERVATIVE	1.9 MMT/yr Least amount of hydrogen expected to be used.	16.7 MMT/yr Amount of GHG reduced if less hydrogen is used.	0.5 MMT/yr Amount of hydrogen Angeles Link would transport in this scenario.	4.5 MMT/yr GHG reduction directly from Angeles Link's operations.
MODERATE	3.2 MMT/yr A moderate amount of hydrogen expected to be used.	24.9 MMT/yr Amount of GHG reduced with moderate hydrogen use.	1.0 MMT/yr Hydrogen amount transported by Angeles Link in this scenario.	7.8 MMT/yr GHG reduction from Angeles Link, reflecting its impact.
AMBITIOUS	5.9 MMT/yr The highest amount of hydrogen expected to be used.	35.7 MMT/yr Maximum GHG reduction with high hydrogen use.	1.5 MMT/yr Most hydrogen transported by Angeles Link under this scenario.	9.0 MMT/yr Largest GHG reduction by Angeles Link, showing significant impact.

Visualizing the Impact: GHG Reductions Through Angeles Link

Understanding the Impact of Angeles Link on GHG Reduction over time

The visualization underscores a dramatic scale-up in the impact of GHG reductions enabled by Angeles Link, with energy savings equivalent to homes increasing nearly sixfold from 2030 to 2045, highlighting significant long-term environmental benefits.





1.4MMT

the equivalent of 180,000 homes

In 2030, Angeles Link would have reduced emissions by 1.4, the equivalent of 180,000 homes

2030



9MMT

the equivalent of 1.1 million homes

Each icon represents the energy usage of 20,000 homes.

GHG Reduction by 2045 for Angeles Link Throughput



4.5 MMT of CO2 Equivalent:

tree seedlings grown for 10 years.

7.8 MMT of CO2 Equivalent: 144M

tree seedlings grown for 10 years.

9 MMT of CO2 Equivalent:

166M

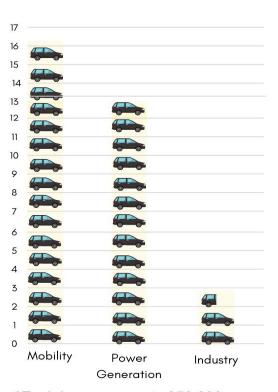
tree seedlings grown for 10 years.

- Low Throughput: Angeles
 Link transports 0.5 MMT/year
 of clean hydrogen, helping
 reduce GHGs by 4.5
 MMT/year.
- Moderate Throughput:
 Angeles Link transports 1.0

 MMT/year of clean hydrogen, reducing GHGs by 7.8 MMT/year.
- High Throughput: Angeles Link transports 1.5 MMT/year of clean hydrogen, reducing GHGs by 9.0 MMT/ year.

Insights on Sector-Specific Impact based on Demand Scenarios

GHG Emission Reductions Across Sectors on Car Emissions Equivalent, by 2045



The Mobility Sector's reduction impact is roughly six times that of the Industrial Sectors and slightly higher than that of Power Generation, underscoring the critical role of transportation advancements in achieving broader emission reduction targets

18MMT/year



The Mobility Sector GHG reduction is equivalent to removing about **4.2** million cars.

15MMT/year



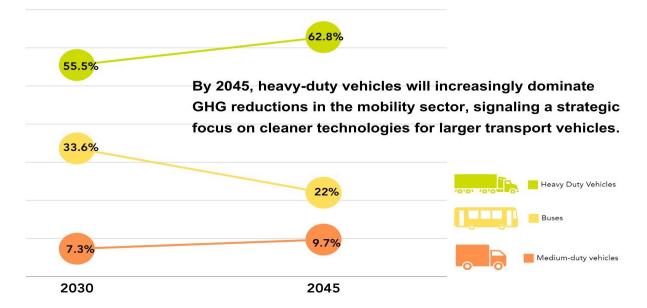
The Power Generation Sector GHG reduction is equivalent to removing about **3.33 million cars.**

2.9MMT/year



Industrial Sectors GHG reduction are equivalent to removing about **644,000 cars**.

Trends in Mobility Subsector Contributions to GHG Reductions: 2030 vs. 2045

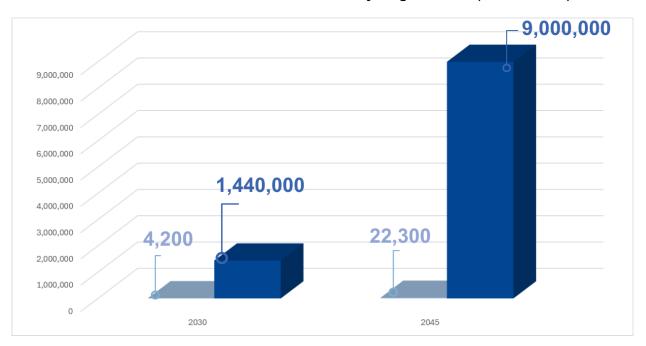


^{*}Each icon represents 250,000 cars removed

Evaluating the Environmental Impact of the Angeles Link

New Hydrogen Infrastructure Emissions vs. End-Users Reductions: Angeles Link's Impact from 2030 to 2045

Estimated GHG Combustion Infrastructure Emissions vs. Expected GHG Combustion Reductions from End Users Served by Angeles Link (2030 & 2045)



- Projected GHG Combustion Infrastructure Emissions (MT CO2e/yr)
- Expected GHG Combustion End User Reductions (MT CO2e/yr)

Note: The terms "new infrastructure" and "hydrogen infrastructure" refer to general hydrogen infrastructure comprised of third-party production, third-party storage, and transmission.

Understanding the Impact of Hydrogen Leakage on Overall GHG reductions

Preliminary High-level Estimate of the Impact of Potential Leakage on Overall GHG reductions estimates is less than 3% for General Hydrogen Infrastructure.

1%

Preliminary High-level Estimate of the Impact of Potential Leakage on Overall GHG reductions estimates is less than 1% for Projected Angeles Link Infrastructure.

2 STUDY APPROACH

The goals of this Study are to estimate GHG combustion emissions associated with the anticipated production, storage, and transmission of hydrogen and estimate GHG combustion emission reductions from end users of hydrogen in the mobility, power generation, and hard to electrify industrial sectors. The parallel Demand Study provided initial details and scenarios that were used to complete these GHG emission estimates. Additional evaluation of GHG emissions for the estimated ranges of Angeles Link throughput of 0.5 to 1.5 MMT per year of hydrogen was also conducted.

The geographic region of this study includes highly populated areas and encompasses a wide range of industrial end-users with the potential to convert to hydrogen as a source of fuel. Among these potential end-users are the San Pedro Ports Complex comprised of the Port of Los Angeles and the Port of Long Beach, the most highly trafficked ports in the United States¹² and Los Angeles International Airport, one of the top five busiest airports in the world.¹³ The study covers the time period from 2030 to 2045 consistent with the assumptions in the Demand Study.

Where applicable, the Study relies on specific technical information from regulatory agencies, transportation agencies, and equipment manufacturers. Research conducted by entities such as academic institutions was evaluated to determine the best available methods for quantifying emissions of GHG from the combustion of hydrogen. When specific information was not available, estimates were made based on availability of related data, or assumptions were developed.

For this Study, GHG emissions from combustion of fossil fuels (diesel, gasoline, and natural gas) are comprised of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O); and GHG emissions from combustion of hydrogen include no carbon emissions and only trace amounts of N₂O.¹⁴ Hydrogen considerations as an indirect GHG have be discussed in a number of research studies and although a single value or range has not been formally adopted by reporting agencies like the California Air Resources Board (CARB), the Environmental Protection Agency (EPA), or the IPCC, it's an important study consideration. The impact of hydrogen to climate change as discussed in the scientific

GHG Emissions Evaluation – Final Report

2.1

¹¹ Estimation of GHG emissions associated with project construction will be considered during the California Environmental Quality Act (CEQA) / National Environmental Policy Act (NEPA) process of the project.

¹² Port of Los Angeles, Statistics website, accessed 2024, https://www.portoflosangeles.org/business/statistics

¹³ KTLA 5 News website, LAX soars to 5th busiest airport in world, April 11, 2022, https://ktla.com/news/local-news/lax-soars-to-5th-busiest-airport-in-world/

¹⁴ Some studies indicate that there is a possibility for N₂O to form directly from the interaction of N₂ and O₂ (primary components of air) during combustion of any fuel.

literature including estimates of effective GWPs for hydrogen are presented in this study report.

Technical Research

The Study collected, reviewed, and analyzed technical research studies and information related to GHG emissions associated with the combustion of hydrogen. This analysis included, but was not limited to:

- Available literature and studies from research-based academic institutions such as the University of California Irvine (UCI) Combustion Laboratory and the Georgia Institute of Technology and private organizations such as the Electric Power Research Institute (EPRI); and technical data or research identified by stakeholders (CBOSG and PAG members) including Environmental Defense Fund (EDF).
- Existing, proposed, and potential future regulatory requirements from federal
 agencies including the Environmental Protection Agency (EPA), the Department
 of Energy (DOE), state agencies such as the California Air Resources Board
 (CARB) and the California Energy Commission (CEC), and local agencies
 including the nine local air districts located within the geographic scope of this
 study such as South Coast AQMD and San Joaquin Valley Air Pollution Control
 District (APCD);
- Technical literature and data releases from government agencies and laboratories including the DOE and the National Renewable Energy Lab (NREL); and
- Potential GHG minimization opportunities from technological advancements.

3 TECHNICAL APPROACH

The following assessment process (Figure 1) was used for the technical approach of this Study. The approach was based on review of technical research studies, research of anticipated technological advancements, stakeholder input and review of the expected evolution of regulatory frameworks.

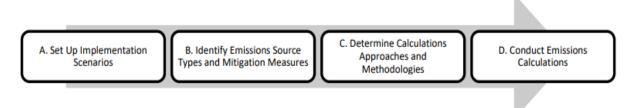


Figure 1. GHG Emissions Assessment Process for GHG Emissions Associated with Angeles Link

3.1 SET UP IMPLEMENTATION SCENARIOS

To evaluate potential GHG emissions and emissions changes associated with Angeles Link, including third-party production and storage, as well as end users, the timeframe from 2030 to 2045 was used. Consistent with the findings of the Demand Study, end use sectors are anticipated to achieve the ability to accommodate 100% hydrogen fuel use at different times due to availability of technology and feasibility of transitioning existing equipment and building new infrastructure. The use of clean renewable hydrogen as fuel for each end-use sector was evaluated beginning with 2030 based on data from the Demand Study. GHG emissions were calculated using the approaches described in the next steps for both the three hydrogen Demand Study scenarios – conservative (1.9 MMTPY), moderate (3.2 MMTPY), and ambitious (5.9 MMTPY), as well as the three hydrogen Angeles Link throughput scenarios – low (0.5 MMTPY), medium (1.0 MMTPY), and high (1.5 MMTPY).

3.2 IDENTIFY EMISSIONS SOURCE TYPES

The Study evaluated GHG combustion emissions by developing emission calculation approaches and methodologies for the following:

- Infrastructure (Third-Party Production, Third-Party Storage, and Transmission)
- End Users (Mobility, Power Generation, and Hard to Electrify Industrial)

Evaluation of GHG emission minimization opportunities was focused on equipment efficiency to minimize fuel use and thereby minimize GHG, as well as equipment design that minimizes formation of N₂O.

The study acknowledges that certain technical literature identified the potential for hydrogen leakage in the production, storage, and transmission of hydrogen. This potential, as well as opportunities to minimize and mitigate the potential for leakage, are discussed in the parallel Final Leakage Study Report. Evaluation of methane leakage in the hydrogen industry is outside the scope of this feasibility analysis.

3.2.1 Hydrogen Production (Third-Party)

Three potential clean renewable hydrogen production methods were evaluated as shown below. Each are projected to produce clean renewable hydrogen consistent with the clean renewable hydrogen definition in the CPUC's Phase 1 Decision. Further details regarding production methodologies are available in the parallel Phase 1 Production Study. Appendix A provides details regarding the development of GHG emission factors related to production. Appendix B includes a summary of the anticipated carbon intensities of production options as discussed in the literature.

- 1) Electrolyzers¹⁵ powered by renewable electricity split water molecules into oxygen (O₂) and hydrogen (H₂). This process does not use combustion so there is no potential for GHG emissions from electrolyzers. It was assumed that only renewable electricity would be used and the indirect GHG emissions would be zero.
- 2) Biomass gasification¹⁶ is a process that involves heat, steam, and oxygen to convert biomass to hydrogen without combustion.. It was assumed that only renewable electricity would be used and the process would be carbon neutral and therefore GHG emissions would be zero.
- 3) Renewable natural gas (RNG) fueled steam methane reformers (SMR). Steam methane reforming is a process in which biogas (RNG) reacts with steam in the presence of a catalyst to produce hydrogen and carbon dioxide. It was assumed that hydrogen would be used as the fuel for any combustion units, such as the heater. This method has direct GHG emissions and those potential emissions were evaluated. It was assumed that only renewable electricity would be used and the indirect GHG emissions would be zero.

The GHG estimates in this Final GHG Study Report related to anticipated third-party production options are based on combustion of 100% clean renewable hydrogen and use of renewable electricity. GHG emissions associated with water procurement, water conveyance, water treatment, and transport of feedstock such as biomass was out of scope for this Study. Estimated carbon intensity values for cradle-to-gate summarized from the literature are provided in Appendix B. Third-party producers will select the source and type of biomass that may be used during biomass gasification which will impact the carbon intensity of the biomass. The biomass used may affect the eligibility of whether

https://www.energy.gov/eere/fuelcells/hydrogen-production-electrolysis

https://www.energy.gov/eere/fuelcells/hydrogen-production-biomass-gasification

¹⁵ DOE, 2024a, Hydrogen Production: Electrolysis,

¹⁶ DOE, 2024b, Hydrogen Production: Biomass Gasification,

the hydrogen produced may be transported via Angeles Link pipeline depending on CPUC directives. Please refer to the Water Study and Production Study for additional information regarding the third-party production methodologies.

3.2.2 Hydrogen Storage (Third-Party) and Transmission

For the purpose of this Study, hydrogen storage may occur aboveground or underground, and will be delivered to end users via pipelines. Storage and transmission of hydrogen will require the use of compressors. Reciprocating or centrifugal compressors would be fueled by clean renewable hydrogen and would not produce CO₂. However, trace amounts of N₂O could form from the nitrogen present in the combustion air at specific temperatures. It was assumed that only renewable electricity would be used and the indirect GHG emissions would be zero. Electric driven compressors would be powered by renewable electricity and both direct and indirect GHG emissions would be zero.

3.2.3 Hydrogen Industrial End Users

Potential GHG emissions reductions from end users in three key sectors were evaluated: Mobility, Power Generation, and Hard to Electrify Industrial sectors. Information obtained from the parallel Demand Study informed the analysis of end uses in each of these three sectors, as well as their respective subsectors and are noted below:

- Mobility: sub-sectors include heavy-duty trucks, medium-duty vehicles, buses, agriculture, construction & mining, cargo handling equipment, ground support equipment, and commercial harbor craft.
- **Power Generation:** turbines are the primary source for potential GHG emissions in power generation.
- Hard to electrify industrial: subsectors include energy intensive industries such as refining, food and beverage manufacturing, primary and fabricated metals, stone, glass, and cement, paper, chemical manufacturing, and aerospace and defense.

Equipment types with the potential for GHG emissions across the power generation and industrial sectors include hot water boilers, steam generating units, process heaters, furnaces/kilns, internal combustion engines, turbines, and miscellaneous combustion equipment.

3.2.4 Opportunities to Minimize GHG Emissions

Opportunities to minimize GHG emissions are related to production methodologies and equipment used to combust hydrogen such as reciprocating or centrifugal compressors. Advanced production technologies, including electrolysis, biomass gasification and renewable natural gas-fueled steam methane reformers, provide opportunities to minimize GHG compared to traditional hydrogen production methods. Optimization of hydrogen storage and transmission includes implementing high-efficiency compressors powered by renewable electricity or hydrogen and ensuring robust infrastructure design

to minimize hydrogen leakage. Various opportunities exist to minimize N₂O emissions, particularly during the design phase of combustion equipment.

3.3 FORMATION OF GHG

Greenhouse gases are a natural part of the Earth's atmosphere that keeps the earth's global mean temperature comfortable for and inhabitable by humans. Without greenhouse gases, the Earth would be much colder. While some atmospheric greenhouse gases are critical for the existence of life as we know it, an excess of greenhouse gases in the atmosphere has the potential to increase the greenhouse effect to a point where the increase in global mean temperature may disrupt global ocean currents, global wind patterns, expected climatic variations, and ultimately, the way life functions on Earth. It is important to understand which gases act as greenhouse gases in the atmosphere and what anthropogenic causes contribute to their release.

Human activities are responsible for increases in greenhouse gases in the atmosphere over the last 150 years. Combustion of fossil fuels occurs when the fuel is burned with oxygen, which can lead to the formation of CO₂ and water vapor (H₂O). CO₂ is one of the most prevalent anthropogenic greenhouse gases. Roughly half of Earth's greenhouse effect is attributable to water vapor in the atmosphere.¹⁷ Increasing global mean temperatures increase the heat flux off the ocean and other bodies of water, which increases evaporation. As temperatures increase, the air in the atmosphere can hold more water due to decreased condensation and precipitation. Water vapor is a direct greenhouse gas, which absorbs the radiation from the Earth and reflects it back. Water vapor exacerbates the warming from other greenhouse gases. The primary difference between water vapor and the other GHGs is that it is condensable. The water cycle works to keep molecules of water in the atmosphere for only a small length of time, roughly nine days on average.¹⁸ This is in comparison to carbon dioxide which can stay in the atmosphere for hundreds of years.

The concept of "global warming potential" (GWP) measures a greenhouse gas's (GHG's) ability to trap heat in the atmosphere compared to carbon dioxide (CO_2). Defined by the US Environmental Protection Agency (EPA)¹⁹, GWP quantifies the heat a greenhouse gas can absorb over a specified period, using the impact of one ton of CO_2 as the reference. This metric is developed and regularly updated by experts at organizations like the Intergovernmental Panel on Climate Change (IPCC) based on comprehensive

¹⁷ Buis, A., 2022, Steamy Relationships: How Atmospheric Water Vapor Amplifies Earth's Greenhouse Effect, NASA Climate webpage article, February 8, https://climate.nasa.gov/explore/ask-nasa-climate/3143/steamy-relationships-how-atmospheric-water-vapor-amplifies-earths-greenhouse-effect/

¹⁸ Buis, A. 2022, Steamy Relationships, Ibid

¹⁹ EPA, 2024a, Greenhouse Gas Emissions: Understanding Global Warming Potentials, https://www.epa.gov/ghgemissions/understanding-global-warming-potentials

reviews of scientific studies. The updates incorporate the latest data, and the GWP values are assessed over different time spans — 20, 100, or 500 years²⁰. The IPCC's Fifth Assessment Report (AR5)²¹ recognized the 100-year GWP as a standard metric from the United Nations Framework Convention on Climate Change (UNFCCC), which was initially applied in the 1997 Kyoto Protocol. AR5 also noted that GWPs for gases that stay in the atmosphere for shorter periods have greater uncertainties compared to those that remain for several decades or centuries. The Sixth Assessment Report (AR6) was selected as the source for GWP values for carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), as these were the most recently published GWPs.²² The AR6 GWP values are used in this study since they are the most recent values. Reporting of GHG to CARB and EPA uses the AR4 GWP 100 value that is lower for methane (25 rather than 29.8). The Study anticipates that GWP for hydrogen will be evaluated for reporting purposes in the future and undergo an evolution in values similar to methane.

3.4 GHG EMISSION FACTORS

The Study evaluated direct GHG emissions from combustion of fossil fuels, hydrogen, and natural gas/hydrogen fuel blends.

3.4.1 Combustion of Displaced Fossil Fuels

Direct GHG emissions comprised of CO₂, CH₄, and N₂O were evaluated for combustion of displaced fossil fuels: natural gas, diesel, and gasoline. EPA Title 40 Code of Federal Regulations (CFR) Part 98 "Mandatory Greenhouse Gas Reporting," was selected as the source for fuel based GHG emissions factors for CO₂, CH₄, and N₂O in units of kilograms (kg) per million British Thermal Units (MMBtu). The GHG emissions factors for CO₂, CH₄, and N₂O associated with diesel, gasoline, and natural gas per EPA 40 CFR Part 98, as well as the GWP 20 and GWP 100 values from IPCC AR6 Table 7.15 of "Climate Change 2021 The Physical Science Basis" Working Group 1 Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change,²³ are shown in Table 1 below.²⁴

²⁰ IPCC, 2014 AR5 Synthesis Report: Climate Change 2014, https://www.ipcc.ch/report/ar5/syr/

²¹ IPCC, 2014, Ibid.

²² IPCC, 2021, Climate Change 2021 The Physical Science Basis, Working Group I Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, https://ipcc.ch/report/ar6/wg1

²³ IPCC, 2021, Ibid.

²⁴ The AR6 GWP values are used in this study since they are the most recent values. Reporting of GHG to CARB and EPA currently uses the AR4 GWP 100 value that is lower for methane (25 rather than 27.0 – 29.8).

Table 1 Summary of Fossil Fuel GHG Combustion Emission Factors					
Pollutant CO ₂ E.F. CH ₄ E.F. N ₂ O E.F. (kg/MMBtu) (kg/MMBtu)					
Diesel	73.96	3.0 x 10-3	6.0 x 10-4		
Gasoline	70.22	3.0 x 10-3	6.0 x 10-4		
Natural Gas	53.06	1.0 x 10-3	1.0 x 10-4		
GWP 100	1	29.8	273		
GWP 20	1	82.5	273		

3.4.2 Combustion of Hydrogen

This Study also explored whether greenhouse gases are produced when hydrogen is combusted. Pure hydrogen fuel does not contain carbon and is therefore considered an option for decarbonizing certain emissions sources and sectors where other low-carbon options might not be technically or economically feasible. Nevertheless, minute amounts of CO₂ might still be detected when measuring emissions, but this CO₂ originates from the combustion air itself, which contains about 0.04% CO₂ by volume. This CO₂ is not produced by the combustion process; instead, it remains unchanged and can exit through the exhaust stack. When combusting hydrogen small amounts of N₂O could potentially form from the interaction of N₂ and O₂ during combustion due to nitrogen and oxygen present in the combustion air. The possibility of forming N₂O is considered minimal and is most likely to occur at low combustion temperatures. When hydrogen is combusted in combination with natural gas, the emissions include CO₂, methane (CH₄) which is unburned fuel from the natural gas component, and N₂O.

CO₂ emissions decrease as the percent of hydrogen in the fuel (on a volume basis) is increased, but they do not decrease linearly. As outlined in a paper published by the EPA titled, "Hydrogen in Combustion Turbine Electric Generating Units Technical Support Document," the difference in volume energy densities between natural gas and hydrogen

²⁵ International Energy Agency (IEA), 2019, The Future of Hydrogen - Seizing today's opportunities, report prepared for the G20 by the IEA, June, https://iea.blob.core.windows.net/assets/9e3a3493-b9a6-4b7d-b499-7ca48e357561/The Future of Hydrogen.pdf

²⁶ West, J., 2019, Wait the Atmosphere is only 0.04% Carbon Dioxide. How Does it Affect Earth's Climate?, SciTechDaily, https://scitechdaily.com/wait-the-atmosphere-is-only-0-04-carbon-dioxide-how-does-it-affect-earths-climate/

²⁷ Colorado, A., V. McDonell and S. Samuelsen, 2017, Direct Emissions of Nitrous Oxide from Combustion of Gaseous Fuels, International Journal of Hydrogen Energy 42(1): 711-719, https://doi.org/10.1016/j.ijhydene.2016.09.202

causes a smaller CO₂ emissions reduction than the percentage of hydrogen in the fuel mixture by volume. However, the study also assessed the extent of N₂O emissions that can be expected from the combustion of hydrogen.

 N_2O is a greenhouse gas that can be formed during combustion that has a 100-year GWP of 273 according to the EPA. N_2O accounts for a very small percentage of GHG combustion emissions from natural gas, gasoline, and diesel fuels, and very small percentage of the resultant CO_2e emissions. N_2O emissions can potentially form from nitrogen in a fuel or nitrogen in combustion air. Given the potential for N_2O formation from combustion air, the potential for N_2O emissions to occur as a result of hydrogen combustion was evaluated as part of this study. Based on research, an extremely conservative emission factor for N_2O of 2 ppmvd was used for this study. Details regarding development of the N_2O emission factor used in this Study report are provided in Appendix A.

3.5 CALCULATION METHODOLOGY

3.5.1 Infrastructure

GHG combustion emissions associated with hydrogen infrastructure, including third-party production and storage were estimated. For hydrogen production, GHG combustion emissions associated with production (i.e., steam-methane reforming) and compression for storage and transmission fueled by hydrogen were estimated. Preliminary assumptions were made to develop GHG combustion emissions estimates. The formula used to calculate these emissions is:

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

The first equation (equation 1) multiplies the quantity of clean renewable hydrogen by the N_2O emission factor assumed in this Study for hydrogen. The emissions for N_2O are then multiplied by the GWP as shown in Table 1 to determine GHG emissions in units of CO2e.

This approach applies emission factors for direct GHG components from the combustion process, scaled according to the specific equipment and operations involved in hydrogen infrastructure.

3.5.2 End Users

Estimating the potential for hydrogen leakage associated with end users of Angeles Link was not feasible given the limited amount of information available. However, some limited information found in the literature has been added to Section 4.1.1 of the Leakage Study. This information was related to end users that may or may not be applicable to Angeles Link.

For end users, based on the emission source type identified, GHG emissions were estimated for combustion of the displaced fossil fuel (diesel, gasoline, natural gas) and for hydrogen combustion, as applicable. For example, specific end user equipment and facility data was not available. Calculations to estimate emissions were prepared using the following two equations:

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

The first equation (equation 1) multiplies the quantity of fuel by the GHG emission factor specific to the fuel for each GHG pollutant. These pollutants are CO₂, CH₄, and N₂O for combustion of fossil fuels and N₂O for combustion of hydrogen. Each GHG has a specific fuel dependent emission factor and a unique GWP as shown in Table 1. The emissions for each of CO₂, CH₄, and N₂O are multiplied by their respective GWP and then summed to obtain the total GHG emissions in units of CO₂e.

The second equation (equation 2) calculates the GHG emission reductions in CO2e by subtracting the GHG emissions for hydrogen (either for N₂O from combustion of hydrogen or zero for hydrogen fuel cells) from the GHG emissions for combustion of displaced fossil fuels. The GHG emissions for combustion of hydrogen and for combustion of fossil fuels are both derived from equation 1.

GHG emissions were calculated at the unit level and scaled based on activity data quantified using information from the Demand Study. Calculations were prepared for the conservative, moderate, and ambitious scenarios in the Demand Study for each year from 2030 to 2045. The Study evaluated the potential for GHG emissions based on the type of equipment and specific source categories from the Demand Study. This approach ensures that both the potential for GHG emissions and opportunities for reductions are comprehensively evaluated.

The GHG emissions factors for CO_2 , CH_4 , and N_2O associated with diesel, gasoline, and natural gas per EPA 40 CFR Part 98, as well as the GWP 20 and GWP 100 values from IPCC AR6, are shown in Table 1. For combustion of clean renewable hydrogen with GHG emissions comprised entirely of N_2O , since the GWP 20 and GWP 100 for N_2O are both 273, the expected impacts in both short term and long term should be similar. Once each calculation estimates for GHG combustion emissions were prepared for new infrastructure and end use sectors, these results were summed to develop an overall estimate using equation 3:

Overall GHG Reductions = End User GHG Reductions - Infrastructure GHG Increases (equation 3)

This structured approach ensures a rigorous and detailed analysis, accommodating the specificities of the GHG emissions associated with different stages of the hydrogen value chain.

3.5.2.1 Mobility Sector

Most on-road and off-road vehicles in the Mobility sector currently use various liquid and gaseous carbon-based fuels driving internal combustion engines. The CARB Emission Factor (EMFAC) model²⁸ was used to provide activity data and/or emissions factors for on-road and off-road mobile sources. The EMFAC model provides activity data such as vehicle miles traveled, vehicle category population counts, fuel consumption by vehicle category, and emissions data for most mobile vehicle types evaluated in this Study. The model contains sufficient data to estimate CO₂, CH₄, and N₂O emissions for on-road mobile sources, and CO₂ emissions for off-road mobile sources. Since the EMFAC model does not include CH₄ and N₂O emissions data for off-road mobile vehicles, additional research was completed to establish the most representative CH₄ and N₂O emissions factors for off-road mobile sources. The EPA Emission Factors for Greenhouse Gas Inventories document most recently modified on September 12, 2023, was selected. This Study consolidates these emissions factors from the Annex tables in the EPA (2022) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020.²⁹

3.5.2.2 Power Generation Sector

The calculation approach for Power Generation to determine the change in emissions after hydrogen adoption consisted of taking the difference in GHG combustion emissions associated with fossil fuels and GHG combustion emissions associated with hydrogen. Stationary source fossil fuel consumption was represented as natural gas for consistency with the Demand Study. The fuel types considered for stationary calculations were pure hydrogen, pure natural gas, and hydrogen-natural gas blends of various percentages.

For the power generation sector, hydrogen usage is expected to begin with hydrogen/natural gas blends and begin to use 100% hydrogen fuel as the technology becomes available. Blended fuels will continue to be used while the in-use units age out. The transition from blended fuels to 100% pure hydrogen fuels was evaluated by the Demand Study in the Power Generation model and was based on technological and economic feasibility and regulatory requirements. These blending assumptions from the Demand Study were utilized within this study.

Mitsubishi, Siemens, and GE are the three largest global turbine manufacturers and have each outlined plans for establishing pure hydrogen firing turbine technology for power

²⁸ CARB, 2024a, EMFAC, https://ww2.arb.ca.gov/our-work/programs/msei/on-road-emfac

²⁹ EPA, 2023c, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021, EPA 430-R-23-002, April 13, https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf

generation. Siemens and GE have published goals to develop heavy-duty DLE and DLN turbines with the ability to combust pure hydrogen by 2030, and Mitsubishi set a goal to develop DLN turbines with the ability to combust 100% hydrogen fuel by 2025.³⁰

While not specifically included in the blending assumptions, hydrogen fuel cell technology has also been proven useful in the Power Generation sector in such applications as primary power, back-up power, peak-shaving, grid stabilization, and tri-generation (power, heat, and hydrogen).³¹

3.5.2.3 Hard to Electrify Industrial Sectors

The calculation approach for Hard to Electrify Sectors to determine the change in emissions after hydrogen adoption consisted of taking the difference in GHG combustion emissions associated with fossil fuels and GHG combustion emissions associated with hydrogen. Stationary source fossil fuel consumption was represented as natural gas for consistency with the Demand Study. The fuel types considered for stationary calculations were pure hydrogen, pure natural gas, and hydrogen-natural gas blends of various percentages.

The Hard to Electrify Industrial sectors evaluated include energy intensive industries that currently uses mostly gaseous and liquid carbon-based fuels in internal and external combustion equipment. Although Angeles Link will deliver 100% hydrogen, usage in these sectors is anticipated to begin with hydrogen/natural gas blends in 2030 by the end users, behind the meter, and eventually transition to use 100% hydrogen fuel by 2050. Once pure hydrogen fuel combustion technology becomes available, it was assumed that blended fuel equipment would be retired or phased out until 100% of hydrogen demand would be utilized by equipment combusting pure hydrogen fuel in 2050. Equipment-level blended hydrogen combustion as a percentage of overall hydrogen consumption is depicted in Table 2B below.

Babcock and Wilcox offers a commercially available steam boiler that can operate on 100% hydrogen fuel, called BrightGen. This unit has the ability to switch between hydrogen and natural gas combustion as needed.³² In 2020, AMF Bakery Systems released the Multibake VITA Tunnel Oven by AMF Den Boer which is fueled by pure

³⁰ EPA, 2023b, Hydrogen in Combustion Turbine Electric Generating Units, Technical Support Document, Docket ID No.EPA-HQ-OAR-2023-0072, May 23, https://www.epa.gov/system/files/documents/2023-05/TSD%20-%20Hydrogen%20in%20Combustion%20Turbine%20EGUs.pdf

³¹ Air Products, 2024, Hydrogen Fueling for Power Generation, online article, n.d., https://www.airproducts.com/applications/power-generation

³² Babcock and Wilcox, 2023, BrightGen[™] Hydrogen Combustion Technology: Utilizing non-carbon-based fuels for steam production, Industry Brochure, https://www.babcock.com/assets/PDF-Downloads/PS-599-BrightGen-Hydrogen-Combustion-Brochure.pdf

hydrogen. Hydrogen fueled ovens have the potential to help decarbonize the Food & Beverage Hard-to-Electrify Industrial sub-sector.³³

The DOE is continuing to invest funding into the research and development of pure hydrogen capable combustion technologies to help decarbonize the Hard-to-Electrify Industrial sector. In January 2024, DOE announced \$10.5M of funding into PACCAR Inc., Cummins Inc., and Powertrain for the development of heavy-duty hydrogen engine technology.³⁴

Heavy-duty hydrogen turbine, engine, oven, and boiler technology has the strong potential to help decarbonize the Hard-to-Electrify Industrial sector. While not all of these technologies are commercially available yet, manufacturers have stated goals to produce this equipment within the next decade.

This Study does not dictate if end users will blend hydrogen with natural gas and makes assumptions regarding adoption rates based on currently available information regarding equipment and the anticipated evolution of adoption over time. Since only 100% clean renewable hydrogen will be delivered, to estimate GHG reductions at end users, assumptions regarding hydrogen adoption rates were made as shown in Tables 2A and 2B.

The values in Table 2A are based on an assumption of steady incremental increases with a goal of complete transition by 2050. The values in Table 2B were estimated based on manufacturer specification sheets and direct measurement studies. A dataset consisting of 22 data points, across 14 manufacturers, from manufacturers' data and scientific literature were used to estimate equipment-level hydrogen-natural gas blending percentages by taking a direct average. The estimated emissions are based on these assumptions.

³³ AMF Bakery Systems, 2020, AMF Bakery Systems Introduces the World's First Emission-Free Hydrogen Tunnel Oven, press release, July 7, https://amfbakery.com/amf-bakery-systems-introduces-the-worlds-first-emission-free-hydrogen-tunnel-oven/

³⁴ DOE, 2024c, Depart of Energy Announces \$10.5 Million to Advance Hydrogen Combustion Engine Innovation, press release, January 31, https://www.energy.gov/eere/fuelcells/articles/department-energy-announces-105-million-advance-hydrogen-combustion-engine

Table 2A Equipment-level Hydrogen-Natural Gas Blending Percentages						
Sauras	al H2 Dema	H2 Demand as Pure Hydrogen				
Source	2025	2030	2035	2040	2045	2050
Engine	0	20	40	60	80	100
Turbine	0	20	40	60	80	100
External Combustion	0	20	40	60	80	100
Oven	0	20	40	60	80	100

Table 2B Equipment Level Hydrogen Natural Gas Blending Ratios for Industrial End-users				
Source	H2 to Natural Gas Ratio			
Engine	25%			
Turbine	57%			
External Combustion	22%			
Oven	22%			

3.5.3 Conduct Emissions Calculations

The Study prepared emission calculations using the emission factors and activity data compiled for each of the topic areas.

- The tool was designed to conduct calculations at the unit level (per unit equipment count, unit distance, unit throughput, or other unit parameters, as applicable).
- The emissions calculation tool was scaled from unit level information to estimate impacts across the geographic region.
- Emission calculations utilized information from evaluated research, the Demand Study, the Leakage Study, and other Phase 1 feasibility studies.

Emissions minimization opportunities can be implemented to reduce GHG (i.e., N_2O) emissions including equipment design opportunities, pre-mixing of air and fuel, management of air to fuel ratio to control combustion temperature, and emerging exhaust gas aftertreatment technologies. N_2O control equipment options also include existing technologies such as SCR and SNCR. Detailed information is available in the excel spreadsheets found in Appendix C.

4 BACKGROUND INFORMATION

4.1 PROPERTIES OF HYDROGEN

To effectively quantify greenhouse gas emissions from hydrogen combustion, one must fully grasp its unique combustive properties and the implications for GHG formation. Hydrogen has unique combustive properties that have the potential to eliminate the formation of GHG when combusted. Hydrogen offers a high energy content per mass and stands as a promising zero-carbon fuel, crucial in a carbon-reduced economy. Its broad flammability range allows operation across diverse air-to-fuel ratios from 34:1 to 180:1.35 However, hydrogen's low ignition energy and high autoignition temperature may heighten the risk of flashback.36 37 Furthermore, hydrogen's high diffusivity helps in achieving even air-to-fuel mixtures, somewhat mitigating leakage-related safety concerns. Nevertheless, its low density means that a much greater volume is required to produce the same energy output as conventional fuels like natural gas.

4.2 REGULATORY INFORMATION

In the evolving landscape of energy regulation, both federal and state initiatives play a crucial role in shaping the future of Angeles Link and further deployment of hydrogen as a sustainable fuel. These policies, aimed at aligning energy production with environmental goals, are instrumental in reducing greenhouse gas emissions. The following discussion offers an in-depth examination of these legislative and regulatory measures.

Federal Legislation and Initiatives

Energy Policy Act of 2005³⁸: This Act supported diverse energy initiatives with provisions that specifically encouraged the development and use of hydrogen technology. It aimed to reduce dependency on fossil fuels and stimulate the commercialization of new energy technologies.

³⁵ College of the Desert, 2001, Module 3: Hydrogen Use in Internal Combustion Engines, Hydrogen Fuel Cell Engines and Related Technologies Rev 0., December, https://www.energy.gov/sites/default/files/2014/03/f11/fcm03r0.pdf

³⁶ Slim, B.K., H. Darmeveil, G.H.J. van Dijk, D. Last, G.T. Pieters, M.H. Rotink, J.J. Overdiep, 2006, Should we add hydrogen to the natural gas grid to reduce CO2 emissions? (Consequences for gas utilization equipment), publication of the 23rd World Gas Conference, Amsterdam,

http://members.igu.org/html/wgc2006/pdf/paper/add11558.pdf

³⁷ Slim, B.K., et. al., Ibid.

³⁸ US Congress, 2005, Energy Policy Act of 2005, Public Law 109-58, August 8, https://www.congress.gov/109/plaws/publ58/PLAW-109publ58.pdf

- Energy Independence and Security Act of 2007³⁹: This legislation expanded the support for renewable fuels, including hydrogen, and required the periodic reevaluation of fuel economy standards, which are crucial for reducing the consumption of petroleum-based fuels and encouraging the use of cleaner alternatives.
- Infrastructure Investment and Jobs Act of 2021⁴⁰: This Act included funding for the development of clean hydrogen hubs, which are intended to accelerate the deployment of hydrogen as a mainstream energy source and demonstrate its viability across different sectors.
- Inflation Reduction Act (IRA) of 2022⁴¹: The IRA passed in August 2022 provides a ten-year Production Tax Credit for clean hydrogen produced after December 31, 2022. The IRA defines tax credit tiers for "qualified clean hydrogen" with a well-to-gate GHG emission rate of less than 4.0 kilograms CO₂e per kilogram hydrogen.

Regulatory Developments

- The U.S. Department of Energy: Established the Clean Hydrogen Production Standard, targeting lifecycle greenhouse gas (GHG) emissions of ≤ 4.0 kg CO₂ equivalent per kilogram of hydrogen produced. This standard aims to ensure that hydrogen production is aligned with environmental goals.⁴²
- The Department of Treasury: Drafted requirements for how to calculate carbon intensity, and to determine eligibility for the new tax credits under Section 45V, which will impact financial incentives for cleaner hydrogen production.⁴³
- The U.S. Environmental Protection Agency: Is updating regulations under the Clean Air Act⁴⁴ to promote the adoption of low-GHG hydrogen, ensuring that the integration of hydrogen technologies does not adversely affect air quality.

https://www.hydrogen.energy.gov/docs/hydrogenprogramlibraries/pdfs/clean-hydrogen-production-standard-guidance.pdf

³⁹ US Congress, 2007 Energy Independence and Security Act of 2007, Public Law 110-140, December 19, https://www.congress.gov/110/plaws/publ140/PLAW-110publ140.pdf

⁴⁰ State of California, 2022a, SB1020 Clean Energy, Jobs, and Affordability Act of 2022, September 19.

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1020

⁴¹ US Congress, 2022, Inflation Reduction Act, Public Law 117-169, August 16, https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf

⁴² Canary Media, "Biden admin's long-awaited hydrogen rules are here — and on the right track" <u>Biden admin's long-awaited hydrogen rules are here — ... | Canary Media</u>
⁴³ DOE, 2023a, U.S. Department of Energy Clean Hydrogen Production Standard (CHPS) Guidance, June.

⁴⁴ DOE, 2023a, Ibid.

California State Legislation and Policies:

- Global Warming Solutions Act of 2006 (AB 32)⁴⁵: Set ambitious targets for GHG reductions, mandating that California's GHG emissions return to 1990 levels by 2020. This act positions the state as a leader in climate action, directly influencing the adoption of cleaner technologies including hydrogen.
- Senate Bill 32 (SB 32)⁴⁶: Extends the goals of AB 32 by targeting a 40% reduction in GHG emissions from 1990 levels by 2030, further pushing the need for innovative energy solutions like hydrogen.
- The Clean Energy and Pollution Reduction Act of 2015 (SB 350)⁴⁷: This Act advances California's energy policy by setting ambitious targets for renewable energy adoption and energy efficiency, aiming to increase the procurement of renewable energy sources to 50% by 2030 and doubling energy efficiency savings in electricity and natural gas end uses.
- The 100 Percent Clean Energy Act of 2018 (SB 100)⁴⁸: This legislation establishes a policy that 100 percent of the state's electricity should come from clean energy sources by 2045 and increased the renewable portfolio standard, indicating that 60% of electricity must be generated from eligible renewable resources by 2030, which directly impacts the hydrogen sector as part of the broader clean energy strategy.
- Assembly Bill 197 (AB 197)⁴⁹: Focuses on direct emission reductions and requires public transparency in emission data, which supports informed decision-making and accountability in emission management.
- California Climate Crisis Act of 2022 (AB 1279)⁵⁰: Sets a long-term goal for achieving carbon neutrality by 2045, underscoring the state's commitment to drastic reductions in GHG emissions through policies including the support for renewable energy sources like hydrogen.

⁴⁵ CARB, 2018, AB32 Global Warming Solutions Act of 2006 Fact Sheet, September 28, https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006

⁴⁶ State of California Legislative Information, 2016a, SB32 California Global Warming Solutions Act of 2006: emissions limit, filed September 8,

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32

⁴⁷ State of California Legislative Information, 2015, SB350 Clean Energy and Pollution Reduction Act of 2015, filed October 7,

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350

⁴⁸ California Energy Commission, 2023, SB100 Joint Agency Report, agency website, https://www.energy.ca.gov/sb100

⁴⁹ State of California Legislative Information, 2016b, AB197 State Air Resources Board: greenhouse gases: regulations, filed September 8,

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB197

⁵⁰ State of California Legislative Information, 2022a, AB1279 The California Climate Crisis Act,

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279

- 2021 Senate Bill 643: Requires the CEC, CARB, and CPUC to assess the hydrogen infrastructure and fuel production required for the transition to zero emission vehicles.⁵¹ Some manufacturers are developing prototype equipment and are hoping that their equipment can ultimately qualify as a Zero Emission Vehicle (ZEV) under CARB's Advanced Vehicle regulations. However, at this time, the only vehicle types that qualify as ZEVs are electric vehicles and hydrogen fuel cell vehicles.
- Zero Emissions for California Ports (ZECAP): A program funded by CARB with GTI Energy to develop and demonstrate zero-emission hydrogen fueled yard trucks at the Port of Los Angeles (POLA). Capacity Trucks built two hydrogen-fueled yard trucks, powered by Ballard fuel cell engines that were then tested at the TraPac Terminal at POLA for one year. The hydrogen-fueled yard trucks operated successfully and with 2.5 to 3 times the efficiency of conventional diesel powertrains.⁵² ⁵³
- Clean Air Action Plan (CAAP) for the Port of Los Angeles and the Port of Long Beach sets targets for 100% ZEVs for cargo handling equipment by 2030.⁵⁴
- Commercial Harbor Crafts: For new or replacement short-run ferries or excursion vessels, after January 1, 2023, the Commercial Harbor Craft Regulation requires that they meet Zero Emissions Advanced Technology (ZEAT).⁵⁵
- Cargo Handling Equipment: The San Pedro Bay Ports Complex issued an initial CAAP in 2017 outlining their goal of achieving 100% ZEVs for cargo handling equipment by 2030, earlier than California's goal of zero emissions from mobile sources by 2035 established in EO N-79-20.⁵⁶ CARB has proposed to begin the transition to ZEVs for cargo handling equipment in 2026.⁵⁷ The CAAP requires that a feasibility assessment for zero-emission and near zero-emission cargo-handling

https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/chc2021/chcfro.pdf

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State of California Legislative Information, 2021, SB643 Fuel cell electric vehicle fueling infrastructure and fuel production: statewide assessment, October 7, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB643
 CARB, 2023a, LCTI: Zero Emissions for California Ports (ZECAP), CARB website, https://ww2.arb.ca.gov/lcti-zero-emissions-california-ports-zecap

⁵³ Sowa, B., 2023, Zero and Near Zero Emission Freight Facilities Project: Zero Emissions for California Ports (ZECAP), GTI Energy, October, https://www.gti.energy/wp-content/uploads/2023/10/ZECAP-Final-Report-GTI-Energy-Rev2.pdf

⁵⁴ San Pedro Bay Ports Clean Air Action Plan, 2023, 2017 Clean Air Action Plan, https://cleanairactionplan.org/

⁵⁵ State of California, 2022b, Final Regulation Order Commercial Harbor Craft Regulation, Final Regulation Order: amending Code of Regulations, title 13, section 2299.5 and title 17, section 93118.5, Filed December 30,

⁵⁶ San Pedro Bay Ports Clean Air Action Plan, 2023, Ibid.

⁵⁷ CARB, 2022a, 2022 State Strategy for the State Implementation Plan, Adopted September 22, https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf

- equipment be completed every three years. In 2020, Hyster-Yale Group entered into a partnership with Capacity Trucks to develop hydrogen yard trucks.⁵⁸ Conductix Wampfler is in the concept design stage for a hydrogen fuel cell-powered RTG crane.⁵⁹
- A proposal has been published to implement a Zero Emission Forklift rule in California as part of CARB's Mobile Source Strategy, State Implementation Plan, and Sustainable Freight Action Plan.⁶⁰
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER): This program has been implemented using funds from the cap-and-trade program to invest in research and development into zero emissions agricultural vehicles.⁶¹
- Advanced Clean Cars II Regulation⁶²: This regulation requires an increasing number of zero-emission vehicles, including battery electric, hydrogen fuel cell electric and plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards and requires all new passenger vehicles sold in California to be zero emissions by 2035.
- AB 8: This legislation required 20 percent of CEC's Clean Transportation Program funding be dedicated to hydrogen refueling stations until there are 100 open retail stations. It also required the CEC and CARB to jointly review and report on progress toward establishing a hydrogen fueling network that provides the coverage and capacity to fuel vehicles requiring hydrogen fuel.⁶³

⁵⁸ Hyster, 2020, Hyster-Yale Group and Capacity Trucks Enter Partnership to Jointly Develop Electric, Hydrogen, and Automation-Ready Terminal Tractors, Press Release, December 14, https://www.hyster.com/en-us/north-america/why-hyster/press-releases/2020/hyster-yale-group-and-capacity-trucks-enter-partnership-to-jointly-develop-electric-hydrogen-and-automation-ready-terminal-tractors/

Tetra Tech/Gladstein, Neandross & Associates, 2022, 2021 Update Feasibility Assessment for Cargo-Handling Equipment, report for San Pedro Bay Ports Clean Air Action Plan, https://cleanairactionplan.org/strategies/cargo-handling-equipment/
60 CARB, 2024b, Zero-Emission Forklifts, https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts/about

⁶¹ CARB, 2023b, FARMER Program, CARB webpage, https://ww2.arb.ca.gov/our-work/programs/farmer-program

⁶² CARB, 2022b, Advanced Clean Cars II, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii

⁶³ CEC and CARB, December 2023, Joint Agency Staff Report on Assembly Bill 8: 2023 Annual Assessment of the Hydrogen Refueling Network in California, https://www.energy.ca.gov/sites/default/files/2023-12/CEC-600-2023-069.pdf

- Executive Order B-48-18⁶⁴: This Executive Order ordered state entities to work with the private sector and all appropriate levels of government to spur construction and installation of 200 hydrogen fueling stations and 250,000 ZEV chargers, including 10,000 DC fast chargers, by 2025.
- AB 1493⁶⁵, SB X1-2⁶⁶, and SB 535⁶⁷: These legislative measures address climate change by setting standards for vehicle GHG emissions, ensuring benefits from climate investments reach disadvantaged communities, and supporting the transition to a sustainable energy economy.
- CARB 2022 Scoping Plan⁶⁸: This comprehensive strategy details actions for increasing the adoption of zero-emission vehicles, expanding renewable energy use, enhancing the cap-and-trade program to incentivize emission reductions, and developing carbon capture and storage technologies. It emphasizes fairness in the distribution of environmental benefits and burdens, particularly in pollution-impacted communities.
- Advanced Clean Trucks and Advanced Clean Fleet regulation⁶⁹ ⁷⁰: These regulations aim to accelerate the transition of medium- and heavy-duty vehicles to zero-emission vehicles, including hydrogen-fueled options, in both public and private transport sectors.

http://www.leginfo.ca.gov/pub/11-12/bill/sen/sb_0501-

0550/sb 535 bill 20120930 chaptered.html

⁶⁴ Governor Brown's Executive Order to spur investments in ZEV infrastructure, https://archive.gov.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html#:~:text=IT%20IS%20FURTHER%20ORDERED%20that,current %20fast%20chargers%2C%20by%202025

⁶⁵ State of California Legislative Information, 2022b, AB1493 Vehicular emissions: greenhouse gases, July 22,

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB1493

⁶⁶ California Energy Commission, Senate Bill X1-2 Implementation,

https://www.energy.ca.gov/proceeding/senate-bill-x1-2-

implementation#:~:text=These%20regulations%20took%20effect%20February,took%20effect%20May%2020%2C%202024

⁶⁷ State of California Legislative Information, 2012, California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund, September 30,

⁶⁸ CARB, 2022c, 2022 Scoping Plan: A pathway to carbon neutrality. <u>2022 Scoping Plan</u> <u>Documents | California Air Resources Board</u>

⁶⁹ CARB, 2021, Advanced Clean Trucks Regulation, filed March 15, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks

⁷⁰ CARB, 2024c, Innovative Clean Transit Regulation, https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/about

- Clean Miles Standard⁷¹ and Innovative Clean Transit rule⁷²: These initiatives specifically promote zero-emission standards in public and commercial transportation, enhancing the role of hydrogen and other clean energy sources in reducing emissions from the transport sector.
- Sector-Specific Regulations: Include regulations like the Zero Emission Airport Shuttle Rule⁷³ and a proposal has been published to implement a Zero Emission Forklift rule in California.⁷⁴
- Additional Legislative Efforts Focusing on Hydrogen: Bills such as SB 1075⁷⁵, which mandates a thorough evaluation of hydrogen's role in California's energy landscape, and SB 414⁷⁶, which requires an assessment of hydrogen applications, are crucial for framing the state's hydrogen strategy. SB 746, which proposes to include hydrogen as an alternate energy source in energy conservation contracts, is also important.⁷⁷

These actions have established California as a leader in promoting renewable fuels and zero-emission technologies, influencing policies across various sectors including transportation and energy.

Feedback from stakeholders such as the Los Angeles Department of Water and Power (LADWP) and the South Coast Air Quality Management District (South Coast AQMD) has emphasized the technological and regulatory challenges in adopting hydrogen. These concerns highlight the need for ongoing adjustments to regulatory approaches to accommodate technological advancements and ensure effective emission reductions.

⁷¹ CARB, 2023c, Clean Miles Standard, https://ww2.arb.ca.gov/our-work/programs/clean-miles-standard

⁷² CARB, 2024c, Ibid.

⁷³ CARB, 2019, Zero-Emission Airport Shuttle Regulation Factsheet, October, https://ww2.arb.ca.gov/sites/default/files/2019-10/asb_reg_factsheet.pdf

DOE, 2018, Fact of the Month November 2018: There Are Now More Than 20,000
 Hydrogen Fuel Cell Forklifts in Use Across the United States,

https://www.energy.gov/eere/fuelcells/fact-month-november-2018-there-are-now-more-20000-hydrogen-fuel-cell-forklifts-use

⁷⁵ State of California Legislative Information, 2022c, SB1075 Hydrogen: green hydrogen: emissions of greenhouse gases, September 16,

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1075

⁷⁶ State of California Legislative Information, 2023, SB 414 Climate Change: applications using hydrogen: assessment, May 18,

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202320240SB414

⁷⁷ State of California, 2023, SB746 Energy conservation contracts: alternate energy equipment: green hydrogen: Tri-Valley-San Joaquin Valley Regional Rail Authority, October 7.

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB746

4.3 TECHNOLOGY DEVELOPMENTS

Manufacturers are advancing technology to enable combustion engines to function entirely on hydrogen, targeting applications in power generation, industrial heating, and transportation. Currently, smaller turbines such as Siemens' SGT-A35, with a capacity of 30-40 MW, and the SGT-400, rated at 10-15 MW, already operate on 100% hydrogen.⁷⁸ However, larger turbine models still require technological enhancements to sustain full hydrogen operation and maintain low air pollution levels. The leading manufacturers in this sector are Siemens, General Electric (GE), Solar, and Mitsubishi.

Both Siemens and GE are working towards developing large, advanced turbines that can achieve 100% hydrogen combustion by 2030. In 2022, the DOE provided financial assistance to manufacturers to develop hydrogen turbine combustion technology through the Industry Advanced Turbine Awards. The manufacturers who received these awards included GE for their H₂ F-Class retrofits, Solar Turbines for their GT Comb System for hydrogen and natural gas blends, and GE Research for their GT-Scale RDC Demo at 7FA cycle condition.⁷⁹

Mitsubishi aims to reach this capability by 2025 and has already made progress; in 2018, their proprietary burner technology in Mitsubishi Hitachi Power Systems achieved a 10% reduction in CO₂ emissions with a 30% hydrogen blend.^{80,81}

GE categorizes its turbines into four groups based on their hydrogen handling capacity: Aeroderivative, B/E-Class, F-Class, and HA-Class. Per GE Vernova, gas turbines are inherently fuel flexible and can be configured to use clean renewable hydrogen as new units or units upgraded after service using natural gas. Aeroderivative, B/E-Class and F-Class can currently handle up to 100% hydrogen and the HA-Class can currently handle 50% and is expected to be able to handle 100% hydrogen in the future.⁸²

Siemens has also demonstrated the adaptability of their turbines to hydrogen: the Aeroderivative SGT-A35 turbines can operate on 100% hydrogen using special burners.⁸³ More recently, in 2023, Siemens announced that their SGT-400 unit, with a 10-15 MW

⁷⁸ EPA, 2023b, Hydrogen in Combustion Turbine Electric Generating Units, Ibid.

⁷⁹ DOE, 2023b, Addressing NO_x Emissions from Gas Turbines Fueled with Hydrogen, H2IQ Hour Webinar, September, www.energy.gov/eere/fuelcells/h2iq-hour-addressing-NO_x-emissions-gas-turbines-fueled-hydrogen

⁸⁰ EPA, 2023b, Hydrogen in Combustion Turbine Electric Generating Units, Ibid.

Mitsubishi Power, 2018, MHPS Successfully Tests Large-scale High-efficiency Gas Turbine Fueled by 30% Hydrogen Mix -- Will Contribute to Reducing CO2 Emissions during Power Generation, industry news release, January 19, https://power.mhi.com/news/20180119.html

⁸² General Electric Vernova, Hydrogen-Fueled Gas Turbines | GE Vernova

⁸³ Siemens Energy, 2023a, SGT-A35 gas turbine, industry webpage, SGT-A35

capacity, successfully ran on 100% hydrogen.⁸⁴ Siemens' HL-class turbines are engineered to manage up to 50% hydrogen combustion.⁸⁵ Finally, Siemens has announced the "Zero Emission Hydrogen Turbine Center" which is a demonstration plant in Sweden to showcase a flexible and sustainable energy system connecting gas turbines with hydrogen, renewable electricity, and energy storage.⁸⁶

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⁸⁴ Hydrogeninsight, 2023, Siemens Energy burns 100% hydrogen in industrial gas turbine in energy-storage pilot, online energy transition publication, October 16, https://www.hydrogeninsight.com/power/correction-siemens-energy-burns-100-hydrogen-in-industrial-gas-turbine-in-energy-storage-pilot/2-1-1535850

⁸⁵ Siemens Energy, 2023b, SGT5-9000HL gas turbine, industry webpage, https://www.siemens-energy.com/global/en/offerings/power-generation/gas-turbines/sgt5-9000hl.html

⁸⁶ Siemens Energy, 2024, Zero Emission Hydrogen Turbine Center, https://www.siemens-energy.com/global/en/home/products-services/solutions-usecase/hydrogen/zehtc.html

5 ASSUMPTIONS AND RESULTS BASED ON DEMAND STUDY

This section summarizes GHG emissions calculations based on the Demand Study, aiming to project annual GHG emissions reductions for each year from 2030 to 2045. These results are grouped by infrastructure and by end-user sectors. Detailed emission calculations are provided in the Appendix to this Final Report. The analysis considers the following categories for projected GHG emissions:

- Infrastructure: This includes the production, storage, and transmission of hydrogen to end-users.
- End-Users: Covers mobility, power generation, and hard-to-electrify industrial sectors that are projected to utilize hydrogen.

Methodology: The methodology aggregates emissions reductions totals for each enduser subsector to derive totals for each sector. These sectoral totals are then summed with the anticipated GHG emissions from the new infrastructure to estimate overall annual GHG emissions reductions for the target years.

5.1 INFRASTRUCTURE

The results for potential GHG emission increases from new hydrogen infrastructure based on the conservative and ambitious demand scenarios for 2045 are up to 0.17% and 0.25% the magnitude of end-user reductions for these same scenarios.

5.1.1 Hydrogen Production (Third-Party)

Three equipment options were evaluated for hydrogen production to meet the definition of clean renewable hydrogen.

- 1. Electrolyzers powered by renewable electricity: zero GHG emissions.
- 2. Biomass gasification: zero GHG emissions⁸⁷
- 3. RNG SMR (Renewable Natural Gas Steam Methane Reforming) with hydrogen as combustion fuel for heater: Could include some GHG emissions in the form of trace amounts of N₂O.

Multiple scenarios were evaluated with varying contributions to total production by each of the three types of equipment listed above to estimate the range of potential GHG emissions. The estimated emissions range from zero GHG associated with the 100% electrolysis and the 100% biomass gasification scenarios to the potential for some GHG emissions for the 100% RNG SMR scenario as detailed below. These estimates can be refined as more detailed project information from third-party producers becomes available, particularly regarding production processes and the proportions of hydrogen

⁸⁷ The Study only considered biomass gasification that uses a process that is carbon neutral.

produced from different methods. Estimated GHG emission results are provided for the conservative and ambitious demand scenarios in Table 3.

Table 3 presents the projected GHG emissions from hydrogen production technologies based on the conservative and ambitious demand scenarios. This table categorizes emissions into minimum and maximum estimates in five-year increments from 2030 to the year 2045. For the conservative demand scenario, the estimates range from 1,120 MT CO2e in 2030 to 16,245 MT CO2e in 2045, based on 100% use of Steam Methane Reforming (SMR) with Renewable Natural Gas (RNG). For the ambitious demand scenario, the estimates range from 9,448 MT CO2e in 2030 to 50,080 MT CO2e by 2045 under the 100% RNG SMR scenario. In contrast, the low estimates demonstrate zero emissions across all years, reflecting scenarios where 100% of hydrogen production is achieved through electrolysis or biomass gasification.

Table 3 Potential Direct GHG Emissions from Hydrogen Production Based on Demand Scenarios								
Demand	Er	nissions (Duadwatian Caanaria					
Scenario	2030	2035	2040	2045	Production Scenario			
Conservative Max	1,120	4,448	9,552	16,245	100% SMR (Max Case)			
Conservative Min	0	0	0	0	100% Electrolysis or Biomass Gasification			
Ambitious Max	9,448	19,565	33,369	50,080	100% SMR (Max Case)			
Ambitious Min	0	0	0	0	100% Electrolysis or Biomass Gasification			

5.1.2 Storage (Third-Party) and Transmission

For the storage and transmission of hydrogen, the following three types of compressors were evaluated. Further details regarding compressors being considered are available in the parallel Phase 1 Pipeline Sizing and Routing Study.

- 1. Electric Motor-Driven Compressors: These utilize electricity from renewable sources, resulting in zero GHG emissions.
- 2. Hydrogen-Fueled Reciprocating Engine Driven Compressors: Emits no CO₂. However, trace amounts of N₂O could form from the nitrogen present in the combustion air at specific temperatures.

3. Hydrogen-Fueled Turbine Driven Compressors: Similar to reciprocating engines, these compressors could also emit trace amounts of N₂O.

Emissions of GHG (as N₂O) from hydrogen fueled reciprocating engine driven compressors and from turbine driven compressors were conservatively estimated using equation 1:

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

The first equation (equation 1) multiplies the quantity of clean renewable hydrogen by the N_2O emission factor assumed in this Study for hydrogen. The emissions for N_2O are then multiplied by the GWP as shown in Table 1 to determine GHG emissions in units of CO2e.

This evaluation assumed that storage requirements would be similar between hydrogen and natural gas to accommodate fluctuations in fuel supply and demand. Data from 2022 from the "2023 California Gas Report Supplement" was used to estimate a California-specific value for the fraction of annual hydrogen demand that would be stored. From this source, it was determined that the average quantity of supplied natural gas in California during 2022 was 6,023 MMcf/day, which equates to approximately 2,198 Bcf/yr. This source also indicated that in 2022 California had a natural gas storage capacity of approximately 304 Bcf. Dividing these two values yielded a maximum (conservative) fraction of annual natural gas demand that would be stored: 13.8%. This value was applied to hydrogen; therefore, it was assumed that annually 13.8% of hydrogen demand would be stored.

The Study evaluates two storage pressure scenarios—290 psi (low pressure) and 2,900 psi (high pressure). These were developed based on an article that presented a variety of hydrogen storage options and their corresponding pressures. The highest and lowest pressures from this publication were utilized to represent the full range of potential storage pressures, and therefore storage compressor energy demands, from this project. These low and high storage pressure scenarios were 20 bar (290 psi) and 200 bar (2,900 bar) respectively.⁸⁹ The energy needed to store hydrogen at 290 psi and 2,900 psi was determined to be 4 megajoules (MJ)/kg and 14 MJ/kg, respectively.

The Study also assumed a transmission distance of 450 miles based on information provided by the Pipeline Sizing and Routing Study. Efficiency values for reciprocating engines and turbines were also sourced from scientific literature to convert fuel energy in

⁸⁸ CPUC, 2023, 2023 California Gas Report Supplement prepared per Decision D.95-01-039.

https://www.socalgas.com/sites/default/files/Joint Biennial California Gas Report 202 3 Supplement.pdf

⁸⁹ Tahan, M., 2022, Recent advances in hydrogen compressors for use in large-scale renewable energy integration, International Journal of Hydrogen Energy 47(83): 35275-35292, https://doi.org/10.1016/j.ijhydene.2022.08.128

units of MMBtu to energy supplied by power sources for compression in units of MJ. These efficiency values were 60.3% and 51.9% for hydrogen fueled reciprocating engines and turbines respectively. Please refer to the Pipeline Sizing and Routing Study for additional information.

These parameters are preliminary assumptions being used since detailed design data is not available for this feasibility study. Future refinements in GHG emission estimates could incorporate more specific details on compressor types, sizes, and quantities, as well as assumptions about storage volumes and pressures. Additionally, development of assumptions regarding aboveground and underground storage volumes and pressures can support development of refinement of GHG emission estimates.

Results for storage and transmission for GHG emissions are provided for the conservative demand scenario in Tables 4 and 5, respectively. Table 4 displays the emissions from hydrogen storage at two pressure levels based on the conservative demand scenario. For high-pressure storage using turbine-driven compressors, emissions rise from 204 MT CO2e in 2030 to 2,959 MT CO2e in 2045. Based on the ambitious demand scenario, the values range from 1,200 MT CO2e in 2030 to 10,599 MT CO2e in 2045. When electric motor-driven compressors are used at any pressure, the emissions remain at zero throughout the study period.

Table 4 Potential Direct GHG Emissions from Hydrogen Storage Based on Demand Scenarios								
Domand	En	nissions	(MT CO ₂ e/	yr)	Scen	ario		
Demand Scenario	2030	2035	2040 2045	2045	Storage Pressure	Power Source		
Conservative Max	204	810	1,740	2,959	2,900 psi	Turbine		
Conservative Min	0	0	0	0	All Pressures	Renewable Electricity		
Ambitious Max	2,000	4,141	7,062	10,599	2,900 psi	Turbine		
Ambitious Min	0	0	0	0	All Pressures	Renewable Electricity		

Table 5 presents the emissions associated with using compressors to support transmission of hydrogen over a 450 mile distance. For hydrogen-fueled compressors, the emissions increase from 609 MT CO2e in 2030 to 8,829 MT CO2e by 2045 for the

conservative demand scenario. Emissions for hydrogen transmission using hydrogen-fueled compressors are estimated at 5,135 MT CO2e in 2030 and 27,220 MT CO2e by 2045 for the ambitious demand scenario. When using electric motor-driven compressors powered by renewable electricity, the emissions are maintained at zero.

Table 5 Potential Direct GHG Emissions from Hydrogen Transmission Based on Demand Scenarios									
Domond	En	nissions (N	⁄IT CO₂e/y	r)	Scena	ario			
Demand Scenario	2030	2035	2040	2045	Transmission Distance	Power Source			
Conservative Max	609	2,418	5,192	8,829	450 miles	Hydrogen			
Conservative Min	0	0	0	0	All Distances	Renewable Electricity			
Ambitious Max	5,135	10,634	18,137	27,220	450 miles	Hydrogen			
Ambitious Min	0	0	0	0	All Distances	Renewable Electricity			

5.2 END USERS

Consistent with the Decision, Angeles Link is intended to transport clean renewable hydrogen to multiple end user sectors. The focus of the GHG emissions study was on three sectors of end-users identified in the parallel Demand Study: mobility, power generation, and hard to electrify industrial. The Demand Study estimated quantities of diesel and gasoline that may be displaced by hydrogen fuel cells in the mobility sector. The Demand Study also estimated quantities of natural gas that may be displaced by hydrogen fuel in the power generation and hard to electrify industrial sectors.

As described in the Routing Analysis, SoCalGas's route selection process evaluates directional pathways that account for engineering, environmental, social, and environmental justice features along four potential preferred routes. A final preferred route will be selected in Phase 2 of Angeles Link. Once the final preferred route is selected, more specific details regarding potential end users can be developed.

The potential for leakage at end users was not quantified as part of this study; and the minimal information regarding leakage at end users that was available in the literature was added to Section 4.1.1 of the Leakage Study.

5.2.1 Mobility

Mobility is the largest end-user sector for GHG emission reductions, accounting for 72.5% and 50.3% of overall reductions in 2045 for the conservative and ambitious demand scenarios, respectively, due to the substitution of hydrogen fuel cells for fossil fuels. Potential sources of GHG emissions in this sector include on-road vehicles such as heavy-duty vehicles (HDV), medium-duty vehicles (MDV), and buses. For example, the 'Zero Emission Bus Transition Plan' specifically targets AC Transit in Oakland, California, focusing on deploying hydrogen fuel cells and electric buses to advance its long-standing public transit services. 90 The Mobility sector also includes off-road vehicles in Agriculture, Commercial Harbor Craft (CHC), Cargo Handling Equipment at ports (CHE), Construction and Mining, and Ground Support Equipment at airports (GSE).

- Conservative Demand Scenario, 2045
 - o On-Road Vehicles account for 93.9% of Mobility GHG emission reductions
 - Heavy Duty Vehicles are 58.5% of Mobility GHG reductions for the year 2045.
 - Off-Road Vehicles account for 6.1% of Mobility GHG emission reductions
- Ambitious Demand Scenario, 2045
 - o On-Road Vehicles account for 94.6% of Mobility GHG emission reductions
 - Heavy Duty Vehicles are 62.8% of Mobility GHG reductions for the year 2045.
 - o Off-Road Vehicles account for 4.4% of Mobility GHG emission reductions

The assumptions for the Mobility sector are primarily that diesel and gasoline fuel will be displaced, and vehicles would convert to hydrogen fuel cells with zero emissions. Emission factors for GHG from displaced diesel and gasoline fuel were developed using EMFAC data. The EMFAC model contains sufficient data to estimate CO_2 , CH_4 , and N_2O emissions for on-road mobile sources, and CO_2 emissions for off-road mobile sources. The EMFAC model does not include CH_4 and N_2O emissions data for off-road mobile vehicles. Research was conducted to estimate the most representative CH_4 and N_2O emissions factors for off-road mobile sources. Fuel consumption was weighted by subcategory of vehicle types. The same two equations previously mentioned were used to conduct the GHG calculations, and the hydrogen emissions value in equation 2 is zero.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

⁹⁰ AC Transit, Zero Emission Bus Transition Plan, 2022, https://www.actransit.org/sites/default/files/2022-06/0162-22%20ZEB%20Transition%20Plan_052022_FNL.pdf (actransit.org)

The total emissions were calculated by summing totals for each equipment type and are shown in Table 6. Figures 2A and 2B provide graphs for the conservative and ambitious demand scenarios, respectively below. The GHG reductions estimated for the conservative demand scenario in 2045 are equivalent to approximately 2.7 million gasoline passenger vehicles driven for one year per EPA Calculator. The GHG reductions estimated for the ambitious demand Scenario in 2045 are equivalent to over 4 million gasoline passenger vehicles driven for one year per EPA Calculator.

Table 6 Mobility Direct GHG Combustion Emission Reductions (million MT CO₂e/yr)							
Demand Scenario	2030 2035 2040 2045						
Conservative	0.94	3.81	7.84	12.14			
Ambitious	4.44	9.04	13.97	17.98			

Table 6 illustrates the expected reductions in GHG emissions within the mobility sector, under conservative and ambitious demand scenarios, spanning from 2030 to 2045. In the conservative demand scenario, GHG reductions are substantial, beginning at approximately 939 thousand metric tons of CO₂ equivalent (MT CO2e) in 2030 and increasing by more than ten-fold to over 12 million MT CO2e by 2045. This increase reflects a growing adoption of hydrogen-fueled mobility solutions. Under the ambitious demand scenario, the reductions are even more pronounced, starting at about 4.4 million MT CO2e in 2030 and escalating to nearly 18 million MT CO2e by 2045. These figures suggest a robust integration of hydrogen in transportation, cutting GHG emissions as the Mobility sector transitions away from fossil fuels.

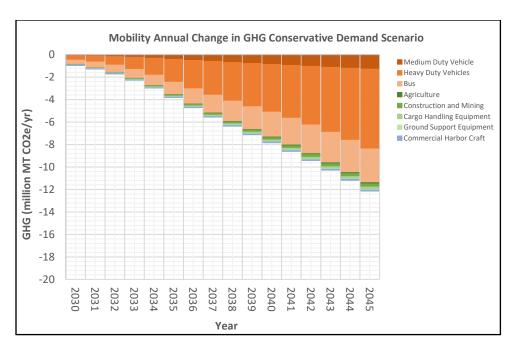


Figure 2A. Mobility Annual Change in GHG - Conservative Demand Scenario

Figure 2A visualizes the annual change in GHG emissions for the Mobility sector under the conservative demand scenario over the period from 2030 to 2045. The chart shows a steady decline in GHG emissions, with the largest reductions seen in heavy-duty vehicles. Medium-duty vehicles, buses, and other categories such as Agriculture and Construction contribute to the overall decrease but to a lesser extent. This trend reflects the potential impact of deploying clean hydrogen fuel cell technology in reducing emissions from various subsectors within mobility, with the most substantial effect seen in the heavy-duty vehicle category.

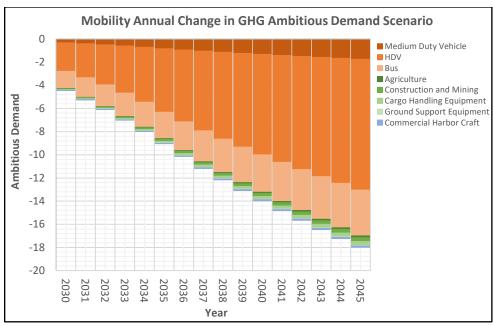


Figure 2B. Mobility Annual Change in GHG - Ambitious Demand Scenario

Figure 2B presents the changes in GHG emissions in the ambitious demand scenario, which assumes higher shift towards hydrogen fuel cell vehicles across the Mobility sector. The decreasing stacked bars, which represent different vehicle categories, indicate an even more pronounced annual decrease in GHG emissions compared to the conservative demand scenario. Heavy-duty vehicles remain the largest contributors to GHG reductions, followed by medium-duty vehicles and buses. The chart illustrates a potential future where a ambitious demand for hydrogen in the mobility sector could lead to much lower GHG emissions, showcasing the Mobility sector's pivotal role in achieving broader climate targets.

5.2.2 Power Generation

The results for the anticipated GHG emissions reductions based on the conservative and ambitious demand scenarios data in 2045 are that the Power Generation sector accounts for 23.6% and 41.7% of overall GHG reductions, respectively. The assumptions that were applied to develop the GHG emissions calculations include that hydrogen will displace natural gas as a fuel with increasing amounts over time (from 2030 to 2045). The potential for leakage at power generation end users such as when hydrogen is transferred from onsite storage or pipelines to onsite hydrogen combustion equipment is acknowledged but was not quantified as part of this study.

This Study is focused on estimating GHG emissions reductions anticipated to be associated with use of clean renewable hydrogen as a fuel in the power generation sector relating to the development of Angeles Link. At the time of this Study, there is not sufficient detailed project information to estimate the quantity of electricity anticipated to be

produced using 100% clean renewable hydrogen as the future annual average utilization and the capacity factor for thermal power plant generation is not known.

For each emission source type identified, calculations to estimate GHG emissions were prepared using the same two equations previously mentioned.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

The first equation (equation 1) multiplies the quantity of fuel by the GHG emission factor specific to the fuel for each GHG pollutant. These pollutants are CO₂, CH₄, and N₂O for combustion of fossil fuels and trace amounts of N₂O for combustion of hydrogen. Each GHG has a specific fuel dependent emission factor and a unique GWP as shown in Table 1. The emissions for each of CO₂, CH₄, and N₂O are multiplied by their respective GWP and then summed to obtain the total GHG emissions in units of CO₂e.

The second equation (equation 2) calculates the GHG emission reductions in CO2e by subtracting the GHG emissions for hydrogen (either for N₂O from combustion of hydrogen or zero for hydrogen fuel cells) from the GHG emissions for combustion of displaced fossil fuels. The GHG emissions for combustion of hydrogen and for combustion of fossil fuels are both derived from equation 1.

As previously noted, for combustion of clean renewable hydrogen, GHG is comprised entirely of N_2O from the nitrogen present in the combustion air at specific temperatures, and since the GWP 20 and GWP 100 for N_2O are both 273, the expected impacts in both short term and long term should be similar. The total emissions were calculated by summing totals for each equipment type and are shown in Table 7. Detailed information is available in the excel spreadsheets found in Appendix C.

Table 7 Power Generation Direct GHG Combustion Emission Reductions (million MT CO₂e/yr)							
Demand Scenario	2030	2035	2040	2045			
Conservative	0.04	0.61	1.87	3.95			
Ambitious	0.16	2.30	7.06	14.90			

Table 7 quantifies the projected reductions in GHG emissions within the Power generation sector for both conservative and ambitious demand scenarios from 2030 to 2045. In the conservative demand scenario, the reductions begin modestly at 0.04 million MT CO2e in 2030, gradually escalating to 3.95 million MT CO2e by 2045, accounting for 23.6% of the overall anticipated GHG reductions. For the ambitious demand scenario, the reductions are greater, starting at 0.16 million MT CO2e and surging to 14.90 million MT CO2e by 2045, contributing to 41.7% of the total expected reductions. These estimates reflect the impact of transitioning to clean renewable hydrogen in Power generation, highlighting the sector's potential contribution to reducing GHG emissions.

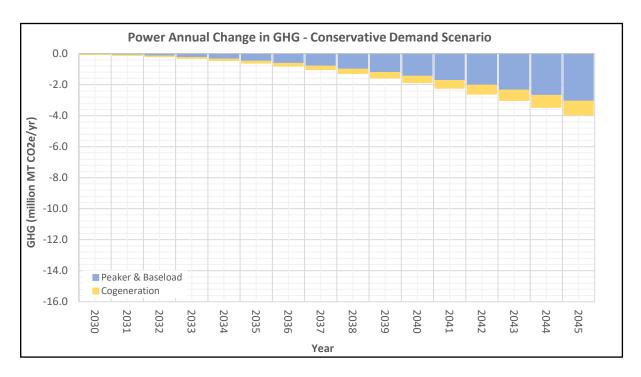


Figure 3A. Power Annual Change in GHG - Conservative Demand Scenario

Figure 3A represents the annual change in GHG emissions for the Power sector under the conservative demand scenario. It features two distinct segments in each bar: the larger, representing base load and peaker power generation units, and the smaller, cogeneration units. Together, they depict a downward trend in emissions, signaling a reduction in GHG as the sector pivots towards clean renewable hydrogen use. By 2045, this shift equates to the GHG emissions of over 769,537 households' annual electricity consumption.

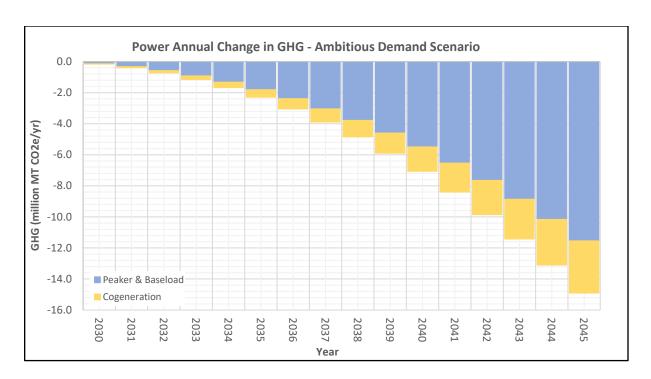


Figure 3B. Power Annual Change in GHG - Ambitious Demand Scenario

Figure 3B illustrates the Power sector's annual GHG emissions changes under the ambitious demand scenario, showing deeper reductions than the conservative demand scenario. This scenario implies a faster adoption of clean renewable hydrogen as a fuel source, with the dark blue and yellow bars representing peaker and base load and cogeneration units, respectively. The staggered bars mirror an increased decline in emissions year over year, culminating in a decrease comparable to the annual electricity use of nearly 2.91 million homes by 2045. This emphasizes the transformative potential of a high demand shift to clean renewable hydrogen fuel, substantially lowering the Power sector's carbon footprint.

5.2.3 Hard to Electrify Industrial

Hard to Electrify Industrial sectors include energy-intensive industries such as refining; food and beverage manufacturing; primary and fabricated metals; stone, clay, and glass (including cement); chemical manufacturing; wood and paper; petroleum products; mining; ammonia production; industrial launderers; co-generation; and textile manufacturing. These sectors are anticipated to initially blend hydrogen with natural gas in 2030 and then eventually transition to pure hydrogen by 2050. Source types with the potential for GHG emissions in the Hard to Electrify Industrial sectors include hot water boilers, steam generating units, process heaters, furnaces/kilns, reciprocating internal combustion engines, turbines, and miscellaneous combustion equipment.

The results for the anticipated GHG emissions reductions associated with the Industrial sector based on the conservative and ambitious demand scenario data in 2045 are that

the Industrial sector accounts for 3.9% and 8.1% of overall GHG reductions, respectively. The assumptions that were applied to develop the GHG emissions calculations include that clean renewable hydrogen will displace natural gas as a fuel with increasing amounts over time (from 2030 to 2045). It should be noted that consistent with the Decision, Angeles Link is intended as a project to transport only 100% clean renewable hydrogen in the pipeline, and any analysis of hydrogen blending refers strictly to "behind-the-meter" operations, not within SoCalGas control. This Study does not dictate if end users will blend hydrogen with natural gas and makes assumptions regarding adoption rates based on currently available information regarding equipment and the anticipated evolution of adoption over time. Since only 100% clean renewable hydrogen will be delivered, to estimate GHG reductions at end users, assumptions regarding hydrogen adoption rates were made as shown in Tables 2A and 2B. The estimated emissions are based on these assumptions.

The potential for leakage at hard to electrify industrial end users such as when hydrogen is transferred from onsite storage or pipelines to onsite hydrogen combustion equipment is acknowledged but was not quantified as part of this study.

For each emission source type identified, calculations to estimate emissions were prepared using the same two equations previously mentioned.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

The first equation (equation 1) multiplies the quantity of fuel by the GHG emission factor specific to the fuel for each GHG pollutant. These pollutants are CO₂, CH₄, and N₂O for combustion of fossil fuels and N₂O for combustion of hydrogen. Each GHG has a specific fuel dependent emission factor and a unique GWP as shown in Table 1. The emissions for each of CO₂, CH₄, and N₂O are multiplied by their respective GWP and then summed to obtain the total GHG emissions in units of CO₂e.

The second equation (equation 2) calculates the GHG emission reductions in CO2e by subtracting the GHG emissions for hydrogen (either for N_2O from combustion of hydrogen or zero for hydrogen fuel cells) from the GHG emissions for combustion of displaced fossil fuels. The GHG emissions for combustion of hydrogen and for combustion of fossil fuels are both derived from equation 1.

As previously mentioned, for combustion of clean renewable hydrogen with GHG emissions comprised entirely of N₂O, since the GWP 20 and GWP 100 for N₂O are both 273, the expected impacts in both short term and long term should be similar.

The total emissions were calculated by summing the totals for each equipment type and are shown in Table 8. Figures 4A and 4B provide graphs for the conservative and ambitious demand scenarios, respectively below. The GHG reductions predicted for the

conservative demand scenario in 2045 are equivalent to 139,007 homes' electricity use for one year per EPA Calculator. The GHG reductions predicted for the ambitious demand scenario in 2045 are equivalent to 603,582 homes' electricity use for one year per EPA Calculator. Detailed information is available in Appendix C.

Table 8 Hard-to-Electrify Industrial Direct GHG Combustion Emission Reductions (million MT CO₂e/yr)							
Demand Scenario	2030	2035	2040	2045			
Conservative	0.28	0.45	0.56	0.65			
Ambitious	1.13	1.91	2.45	2.89			

Table 8 focuses on the GHG emission reductions in the industrial sector, a variety of energy-intensive industries facing challenges in electrification. The table reflects emission reductions from 2030 through 2045 under conservative and ambitious demand scenarios. Under the conservative demand scenario, reductions start at 0.28 million MT CO2e in 2030, modestly increasing to 0.65 million MT CO2e by 2045. This change represents a steady progression towards cleaner energy usage within these industries, accounting for 3.9% of the overall GHG reduction. In contrast, the ambitious demand scenario starts at 1.13 million MT CO2e in 2030, ramping up to 2.89 million MT CO2e by 2045, indicating more aggressive adoption rates of clean renewable hydrogen as a replacement for natural gas, contributing to 8.1% of total GHG reductions. The trajectory of both scenarios suggests an evolving industrial landscape where clean renewable hydrogen plays a key role in reducing emissions.

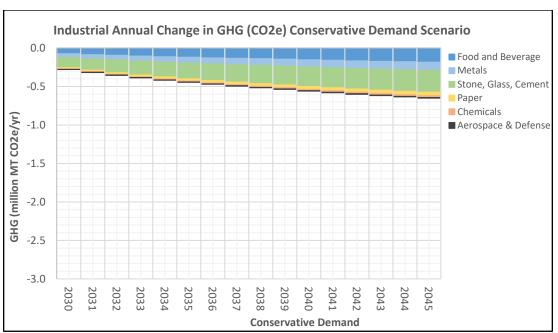


Figure 4A. Industrial Annual Change in GHG - Conservative Demand Scenario

Figure 4A visualizes the decline in GHG emissions across various sub-sectors in the industrial sector for the conservative demand scenario. It showcases how industries like food and beverage, metals, and others are expected to reduce their emissions over the years, with the most substantial decreases projected in the refining sector. The total projected GHG emission reductions in 2045 are equivalent to the annual electricity usage of about 139,000 homes.

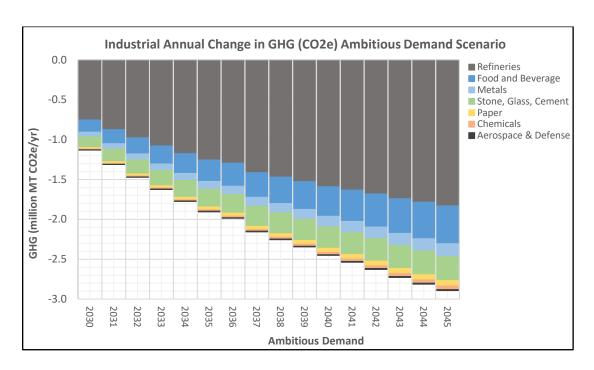


Figure 4B. Industrial Annual Change in GHG – Ambitious Demand Scenario

Figure 4B depicts a larger reduction in GHG emissions within the industrial sector under the ambitious demand scenario. The larger scale of reductions mirrors a more robust transition to clean renewable hydrogen fuel, with the refining sector again making up the largest proportion of decreases. The graph indicates that the industrial sector could achieve GHG reductions in 2045 equating to the yearly electricity use of 603,582 homes. This scenario emphasizes the sector's potential for substantial contributions to overall emission reductions with an intensified hydrogen adoption rate.

6 OVERALL RESULTS BASED ON DEMAND STUDY SCENARIOS

The anticipated potential minor GHG emissions associated with the new infrastructure were added to the overwhelmingly large anticipated GHG emissions reductions associated with potential end users of clean renewable hydrogen as defined by the Demand Study.⁹¹ The total GHG reductions predicted for the conservative demand scenario in 2045 for end-users are equivalent to more than 3,255,000 homes' electricity use for one year per EPA Calculator. The total GHG reductions predicted for the ambitious demand scenario in 2045 for end-users are equivalent to more than 6,961,000 homes' electricity use for one year per EPA Calculator. The results are provided in Table 9 and in Figures 5A and 5B below. Detailed information is available in the excel spreadsheets found in Appendix C.

In summary:

- Projected up to nearly 17 and 36 million metric tons of CO2e removed per year from SoCalGas territory geographic area by end users by 2045 for conservative and ambitious demand scenarios, respectively.
- Infrastructure GHG emissions are smaller than end-user reductions.
 - The highest potential infrastructure GHG emissions estimated are 0.17% and 0.25% the magnitude of overall end-user reductions for conservative and ambitious demand scenarios, respectively, in 2045.
- Mobility GHG emissions would be eliminated with clean renewable hydrogen substitution when fossil fuels are replaced with hydrogen fuel cells. In the Mobility sector, hydrogen fuel cells offer a substantial reduction in GHG emissions by replacing diesel and gasoline in vehicles. This sector shows the highest reduction potential due to the large contributions to emissions by heavy-duty and mediumduty vehicles using traditional fuels.
 - Mobility comprises 72.5% and 50.3% of overall GHG reductions for conservative and ambitious demand scenarios, respectively, in the year 2045.
- Industrial and Power Generation GHG emissions are almost entirely eliminated when fossil fuels are replaced by clean renewable hydrogen as a fuel in combustion equipment. Hard-to-Electrify Industrial sectors benefit from clean

⁹¹ SoCalGas's Demand Study projections were based on independently developed assumptions and analysis of potential hydrogen uptake in the SoCalGas service territory. The Demand Study was peer reviewed by experts at third parties, including National Renewable Energy Lab (NREL), South Coast Air Quality Management District (South Coast AQMD), University of California Los Angeles (UCLA), UC Irvine (UCI), and UC Davis (UCD). When looking at these projections holistically, the Demand Study's conclusions are near or within the range of recently released projections of hydrogen demand in California.

renewable hydrogen in reducing emissions from processes that are currently reliant on high-temperature operations and fossil fuels. The smaller percentage in overall reductions compared to mobility and power generation reflects the complex challenges and slower transition expected in these sectors.

- Power generation comprises 23.6% and 41.7% of overall GHG reductions for conservative and ambitious demand scenarios, respectively, in 2045.
- o Industrial comprises 3.9% and 8.1% of overall GHG reductions for conservative and ambitious demand scenarios, respectively, in 2045.

Table 9 Annual Change in Direct GHG Emissions for Demand Scenarios (MT CO₂e/yr)								
Category	Demand Scenario	2030	2035	2040	2045			
	Conservative	-1,261,530	-4,864,767	-10,265,012	-16,731,269			
End-Users	Moderate	-2,762,724	-7,948,981	-15,674,833	-24,958,279			
	Ambitious	-5,729,290	-13,244,418	-23,490,552	-35,776,958			
	Max - Conservative	1,966	7,807	16,765	28,512			
	Max – Moderate	4,234	13,363	27,657	46,447			
Infrastructure	Max – Ambitious	16,583	34,339	58,568	87,899			
imastructure	Min - Conservative	0	0	0	0			
	Min – Moderate	0	0	0	0			
	Min – Ambitious	0	0	0	0			
	Conservative	-1,259,565	-4,856,960	-10,248,247	-16,702,756			
TOTAL	Moderate	-2,758,490	-7,935,593	-15,647,156	-24,911,832			
	Ambitious	-5,712,707	-13,210,054	-23,431,964	-35,689,059			

Table 9 presents a comprehensive view of the anticipated yearly change in GHG emissions across different scenarios, capturing the transformational impact of clean renewable hydrogen adoption by end-users within the SoCalGas territory by 2045. In the conservative demand scenario, end-user emissions reductions start at 1.3 million metric tons (MT) of CO2e per year in 2030 and expand to a reduction of 16.7 million MT CO2e by 2045. The moderate and ambitious scenarios show even more dramatic decreases, with the ambitious scenario projecting reductions of over 35.8 million MT CO2e annually by 2045. Conversely, infrastructure related GHG emissions represent a minimal increase in the overall emissions profile, peaking at just 0.29% of the magnitude of end-user reductions.

The overall GHG reductions shown conservatively apply the high-end (max values) of the infrastructure emission estimates that range from zero to 87,899 MT/year in 2045 for the ambitious demand scenario. The overall estimated GHG reductions range from 5.7 MMTYP CO₂e in 2030 to 35.7 MMTPY CO₂e by 2045.

The analysis shows the potential for GHG emission reductions, equating to the annual power usage of over 3.25 million homes for the conservative demand scenario and more than 6.96 million homes for the ambitious demand scenario, emphasizing the role of endusers in driving down GHG emissions through hydrogen use.

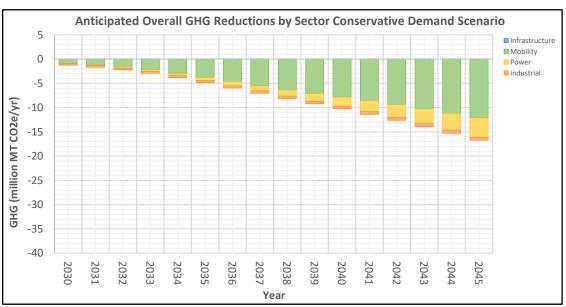


Figure 5A. Anticipated Overall GHG Reductions by Sector - Conservative Demand Scenario

Figure 5A depicts the anticipated GHG reductions by sector in the conservative demand scenario. It shows that the Mobility sector accounts for the largest share of reductions, making up 72.5% of the total decrease in emissions. This sector's change is depicted as the largest portion, underscoring the impact of replacing traditional vehicle fuels with

hydrogen fuel cells. Power generation and industrial sectors follow, illustrating the transition from fossil fuels to clean hydrogen and their respective contributions to the total reduction in emissions. The clear delineation of contributions across sectors highlights the critical importance of sector-specific strategies in achieving GHG emission targets.

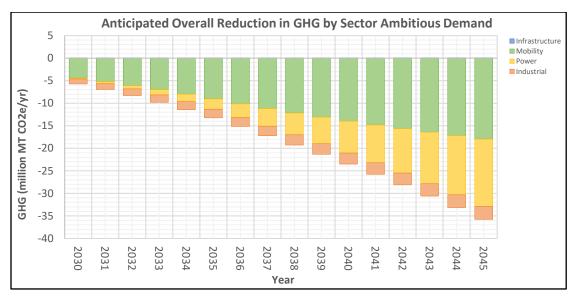


Figure 5B. Anticipated Overall GHG Reductions by Sector - Ambitious Demand Scenario

In Figure 5B, the reductions in GHG emissions are presented under the ambitious demand scenario, indicating a faster approach to hydrogen integration. The scale of reductions is more substantial compared to the conservative demand scenario, with Mobility again constituting the bulk of the decrease but at a relatively lower percentage, suggesting a broader distribution of clean hydrogen usage across sectors. The Power sector's contribution is markedly increased, consistent with the larger role of clean hydrogen in high-demand futures. The Industrial sector, while smaller in percentage, also shows a decrease in emissions, reaffirming the potential of hydrogen to transform even the most challenging sectors. The collective representation of sectors in this figure reflects a dynamic shift towards a low-carbon economy with substantial GHG emissions reductions.

7 ASSUMPTIONS AND RESULTS FOR ANGELES LINK THROUGHPUT SCENARIOS

Emission calculation results including assumptions are provided for the following categories that were evaluated for the Angeles Link Throughput Scenarios. The projected GHG emissions reductions totals for each end-user subsector were summed to estimate totals for each sector; and then totals for each sector were summed and added to anticipated GHG emissions associated with new infrastructure to estimate the overall annual GHG emissions reductions based upon the Angeles Link Throughput Scenarios and anticipated for each year 2030 to 2045.

- Infrastructure: production, storage, and transmission of hydrogen to end-users
- End-Users: mobility, power generation, and hard-to-electrify industrial sectors projected to use hydrogen

This document provides the results of the GHG study. Detailed emission calculations based on the Angeles Link Throughput Scenarios are provided in Appendix C.

7.1 INFRASTRUCTURE

The results for potential GHG emission increases associated with the new Angeles Link-related infrastructure based on the data for 2045 project that such are up to 0.17% and 0.25% the magnitude of end-user reductions for Angeles Link Low and High Throughput Scenarios, respectively.

7.1.1 Hydrogen Production (Third-Party)

Three equipment options were evaluated for hydrogen production to meet the definition of clean renewable hydrogen:

- 1. Electrolyzers powered by renewable electricity: zero GHG
- 2. Biomass gasification: zero GHG⁹²
- 3. RNG SMR with hydrogen as combustion fuel for heater: Could include some GHG emissions in the form of trace amounts of N₂O.

Multiple scenarios were evaluated with varying contributions to total production by each of the three types of equipment listed above to estimate the range of potential GHG emissions. The range extends from zero GHG associated with 100% electrolysis and 100% biomass gasification scenarios to the potential for some GHG emissions for the 100% RNG SMR scenario. GHG emission estimates can be refined once further project details are developed, including assumptions regarding anticipated production processes and proportions of hydrogen intended to be produced from different methods have been

⁹² The Study only considered biomass gasification that uses a process that is carbon neutral.

identified. Results are provided for the Low and High Throughout Scenarios in Table 10. Detailed information is available in the excel spreadsheets found in Appendix C.

Table 10 Potential Direct GHG Emissions from Hydrogen Production Based on Angeles Link Throughput Scenarios								
Angeles Link	Emi	ssions (M	T CO2e/ye	ear)				
Throughput Scenario	2030	2035	2040	2045	Production Scenario			
Low Min	0	0	0	0	100% Electrolysis or 100% Biomass Gasification			
Low Max	301	1,194	2,564	4,361	100% SMR (Max Case)			
High Min	0	0	0	0	100% Electrolysis or 100% Biomass Gasification			
High Max	2,396	4,962	8,463	12,701	100% SMR (Max Case)			

Table 10 depicts the estimated GHG emissions from hydrogen production related to the throughput scenarios. For both low and high throughput scenarios, the minimum potential emissions are zero, representing methods like electrolysis and biomass gasification. In contrast, the maximum emissions under the low throughput scenario rise from about 301 MT CO2e in 2030 to 4,361 MT CO2e by 2045 for 100% SMR. Similarly, under the high throughput scenario, maximum emissions increase from 2,396 MT CO2e to 12,701 MT CO2e within the same timeframe for the 100% SMR option.

7.1.2 Storage (Third-Party) and Transmission

Compressors will be needed for storage and transmission of hydrogen. Three options for types of compressors were evaluated.

- 1. Electric motor driven compressors (zero GHG emissions)
- 2. Clean renewable hydrogen fueled reciprocating engine driven compressors (some GHG emissions)
- 3. Clean renewable hydrogen fueled turbine driven compressors (some GHG emissions)

Emissions of GHG (as N₂O) from hydrogen fueled reciprocating engine driven compressors and from turbine driven compressors were conservatively estimated using equation 1.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

The first equation (equation 1) multiplies the quantity of clean renewable hydrogen by the N_2O emission factor assumed in this Study for hydrogen. The emissions for N_2O are then multiplied by the GWP as shown in Table 1 to determine GHG emissions in units of CO2e.

Two storage pressure scenarios were evaluated - a low pressure scenario at 290 psi and a high-pressure scenario at 2,900 psi. A total transmission distance of 450 miles was evaluated. These assumptions were made for this Study and additional information is available in the parallel Pipeline Sizing and Routing Study. GHG emission estimates can be refined once the types, sizes, and quantities of compressors have been further developed. Additionally, development of assumptions regarding aboveground and underground storage volumes and pressures will support refinement of potential GHG emission estimates for third-party storage. Results for storage and transmission for GHG emissions are provided in Tables 11 and 12, respectively. Detailed information is available in the excel spreadsheets found in Appendix C.

Table 11 Potential Direct GHG Emissions from Hydrogen Storage Based on Angeles Link Throughput Scenarios								
Angeles Link	Emis	ssions (I	MT CO₂e	/yr)	S	cenario		
Throughput Scenario	2030	2030 2035 2040 204	2045	Storage Pressure	Power Source			
Low Min	0	0	0	0	NA	Renewable Electricity		
Low Max	64	253	543	923	2,900 psi	Turbine Engine		
High Min	0	0	0	0	NA	Renewable Electricity		
High Max	507	1,050	1,791	2,688	2,900 psi	Turbine Engine		

Table 11 outlines the potential GHG emissions from hydrogen storage under different Angeles Link throughput scenarios. The table presents a range from zero emissions, which would occur when using renewable electricity for all storage pressures, to a maximum emission scenario where hydrogen is stored at high pressure (2,900 psi) using turbine engines. The maximum emissions for the low throughput scenario grow from

about 64 MT CO2e in 2030 to 923 MT CO2e by 2045. In the high throughput scenario, the projected maximum emissions are greater, starting at 507 MT CO2e in 2030 and reaching approximately 2,688 MT CO2e by 2045.

Table 12 Potential Direct GHG Emissions from Transmission Based on Angeles Link Throughput Scenarios								
Angeles Link	Emi	ssions (MT CO2	e/yr)	Scen	ario		
Throughput Scenario	2030	2035	2040	2045	Transmission Distance	Power Source		
Low Min	0	0	0	0	NA	Renewable Electricity		
Low Max	163	649	1,394	2,371	450 miles	NA		
High Min	0	0	0	0	NA	Renewable Electricity		
High Max	1,302	2,697	4,600	6,903	450 miles	NA		

Table 12 presents the anticipated GHG emissions from the transmission of hydrogen, varying by Angeles Link throughput scenarios over a set distance of 450 miles. Similar to the hydrogen production and storage tables, the emissions for transmission are presented as ranging from zero—using renewable electricity—to a maximum calculated based on undefined sources (NA). For the low throughput scenario, maximum emissions estimates increase from about 163 MT CO2e in 2030 to 2,371 MT CO2e by 2045. The high throughput scenario starts with 1,302 MT CO2e in 2030 and climbs to 6,903 MT CO2e by 2045. These figures provide an insight into the anticipated GHG emissions associated with hydrogen transmission. Detailed information is available in the excel spreadsheets found in Appendix C.

7.2 END USERS

Consistent with the Decision, Angeles Link is intended to transport clean renewable hydrogen to the end users. The focus of the GHG emissions study was on three sectors of end-users: mobility, power generation, and hard to electrify industrial. The Throughput Scenarios estimated quantities of diesel and gasoline that may be displaced by hydrogen fuel cells in the mobility sector. The Throughput Scenarios also estimated quantities of natural gas that may be displaced by hydrogen fuel in the power generation and hard to

electrify industrial sectors. The potential for leakage at end users is acknowledged but was not quantified as part of this Study.

7.2.1 Mobility

Summary of results for the anticipated GHG emission reductions associated with the Mobility sector based on the Low and High Throughput Scenarios for Angeles Link in 2045 are the following.

- Mobility is the largest end-user sector of GHG reductions at 72.5% and 50.3% of overall reductions for Low and High Throughput Scenarios, respectively. These reductions are due to hydrogen fuel cell substitution for fossil fuels nearly eliminating GHG emissions. The potential for leakage such as during refueling of vehicles is acknowledged but was not quantified as part of this study.
 - Low Throughput Scenario
 - On-Road Vehicles account for 93.9% of Mobility GHG reductions
 - Heavy Duty Vehicles are 58.5% of Mobility GHG reductions
 - Off-Road Vehicles account for 6.1% of Mobility GHG reductions
 - High Throughput Scenario
 - On-Road Vehicles account for 94.6% of Mobility GHG reductions
 - Heavy Duty Vehicles are 62.8% of Mobility GHG reductions
 - Off-Road Vehicles account for 4.4% of Mobility GHG reductions

On-Road Vehicles, Heavy Duty Vehicles, and Off-Road Vehicles have distinct roles in the mobility sector's GHG reductions, with on-road vehicles leading in both scenarios due to their higher contributions to emissions. The assumptions associated with the Mobility sector are primarily that diesel and gasoline fuel will be displaced, and vehicles would convert to hydrogen fuel cells with zero emissions. Emission factors for GHG from displaced diesel and gasoline fuel were developed using EMFAC data. The EMFAC model contains sufficient data to estimate CO₂, CH₄, and N₂O emissions for on-road mobile sources, and CO₂ emissions for off-road mobile sources. The EMFAC model does not include CH₄ and N₂O emissions data for off-road mobile vehicles. Research was conducted to estimate the most representative CH₄ and N₂O emissions factors for off-road mobile sources. Fuel consumption was weighted by subcategory of vehicle types. The same two equations previously mentioned were used to conduct the GHG calculations, and the hydrogen emissions value in equation 2 is zero.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

The first equation (equation 1) multiplies the quantity of fuel by the GHG emission factor specific to the fuel for each GHG pollutant. These pollutants are CO₂, CH₄, and N₂O for combustion of fossil fuels and N₂O for combustion of hydrogen. Each GHG has a specific fuel dependent emission factor and a unique GWP as shown in Table 1. The emissions

for each of CO₂, CH₄, and N₂O are multiplied by their respective GWP and then summed to obtain the total GHG emissions in units of CO₂e.

The second equation (equation 2) calculates the GHG emission reductions in CO2e by subtracting the GHG emissions for hydrogen (either for N₂O from combustion of hydrogen or zero for hydrogen fuel cells) from the GHG emissions for combustion of displaced fossil fuels. The GHG emissions for combustion of hydrogen and for combustion of fossil fuels are both derived from equation 1.

The total emissions were calculated by summing totals for each equipment type and are shown in Table 13. Figures 6A and 6B provide graphs for the Low and High Throughput Scenarios, respectively below. The GHG reductions estimated for the Low Throughput Scenario in 2045 are equivalent to 775,000 gasoline passenger vehicles driven for one year per EPA Calculator. The GHG reductions estimated for the High Throughput Scenario in 2045 are equivalent to about 1,085,300 gasoline passenger vehicles driven for one year per EPA Calculator. Detailed information is available in the excel spreadsheets found in Appendix C.

Table 13 Mobility Direct GHG Emission Reductions Associated with Angeles Link Throughput Scenarios (million MT CO₂e/yr)							
Scenario	2030	2035	2040	2045			
Low	0.25	1.02	2.10	3.26			
High	1.12	2.29	3.54	4.56			

Table 13 presents the GHG emission reductions within the mobility sector as a result of the Angeles Link Throughput Scenarios from 2030 to 2045. In the Low Throughput Scenario, the reductions begin at 0.25 million MT CO2e in 2030 and increase over the years to reach 3.26 million MT CO2e by 2045. This indicates a steady increase in the use of hydrogen as a fuel, replacing traditional carbon-intensive fuels in vehicles. The High Throughput Scenario predicts reductions starting with 1.12 million MT CO2e in reductions in 2030 and expanding to 4.56 million MT CO2e by 2045. These substantial figures suggest aggressive displacement of fossil fuels with hydrogen fuel cells, reflecting the potential for large GHG reductions in the transportation sector with the adoption of clean renewable hydrogen technology.

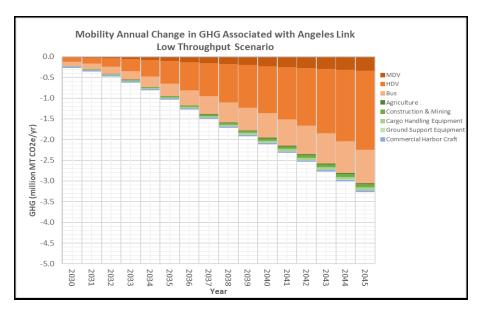


Figure 6A. Mobility Annual Change in GHG for Angeles Link - Low Throughput Scenario

Figure 6A illustrates the projected yearly reductions in GHG emissions from various subsectors of mobility, such as Medium Duty Vehicles (MDV), Heavy Duty Vehicles (HDV), Buses, and Agriculture from 2030 to 2045. The dominant segments, representing MDVs, indicate that this subsector is expected to contribute the largest share to GHG reductions, particularly as we approach 2045. The figure reflects an increased rate of emission reductions over time, aligning with the anticipated broader adoption of clean hydrogen fuel cells in these vehicle categories.

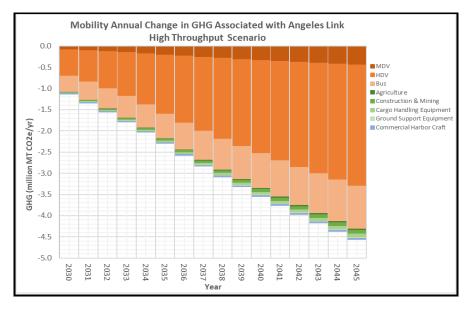


Figure 6B. Mobility Annual Change in GHG for Angeles Link - High Throughput Scenario

In Figure 6B, we see a similar trend of GHG reduction across the mobility sector, albeit with smaller absolute numbers compared to the high throughput scenario. This chart shows that even with a more conservative adoption of hydrogen fuel cell technology, emission reductions are projected, especially from MDVs and buses, which make up the majority of the reductions. The gradual increase in the size of the colored segments over the years suggests the growing impact of transitioning to hydrogen-powered transportation within the lower demand framework. The graph indicates that by 2045, the shift to hydrogen in mobility could yield emission reductions comparable to taking a large number of traditional vehicles off the road.

7.2.2 Power Generation

Results for anticipated GHG emissions reductions based on the Angeles Link Low and High Throughout Scenarios in 2045 are that the Power Generation sector accounts for 24% and 42% of overall GHG emissions reductions, respectively. The assumptions that were applied to develop the GHG emissions calculations include that hydrogen will displace natural gas as a fuel with increasing amounts over time (from 2030 to 2045). The potential for leakage at power generation end users such as when hydrogen is transferred from onsite storage or pipelines to onsite hydrogen combustion equipment is acknowledged but was not quantified as part of this study.

This Study is focused on estimated GHG reductions anticipated to be associated with use of hydrogen as a fuel in the power generation sector relating to the development of Angeles Link. At the time of this study report, there is not sufficient detailed project information to estimate the quantity of electricity that is anticipated to be produced using 100% clean renewable hydrogen as a fuel to electric generating equipment as the future annual average utilization or the capacity factor for thermal power plant generation is not known. For each emission source type identified, calculations to estimate GHG emissions were prepared using the same two equations previously mentioned.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

The first equation (equation 1) multiplies the quantity of fuel by the GHG emission factor specific to the fuel for each GHG pollutant. These pollutants are CO₂, CH₄, and N₂O for combustion of fossil fuels and N₂O for combustion of hydrogen. Each GHG has a specific fuel dependent emission factor and a unique GWP as shown in Table 1. The emissions for each of CO₂, CH₄, and N₂O are multiplied by their respective GWP and then summed to obtain the total GHG emissions in units of CO₂e.

The second equation (equation 2) calculates the GHG emission reductions in CO2e by subtracting the GHG emissions for hydrogen (either for N₂O from combustion of hydrogen or zero for hydrogen fuel cells) from the GHG emissions for combustion of displaced fossil fuels. The GHG emissions for combustion of hydrogen and for combustion of fossil fuels are both derived from equation 1.

As previously mentioned, for combustion of clean renewable hydrogen with GHG comprised entirely of N₂O, since the GWP 20 and GWP 100 for N₂O are both 273, the expected impacts in both short term and long term should be similar.

The total emissions were calculated by summing totals for each equipment type and are shown in Table 14. Figures 7A and 7B provide graphs for the Angeles Link Low and High Throughput Scenarios, respectively below. The GHG reductions estimated for the Low Throughput Scenario in 2045 are equivalent to 206,101 homes' electricity use for one year per EPA Calculator. The GHG reductions estimated for the High Throughput Scenario in 2045 are equivalent to 735,486 homes' electricity use for one year per EPA Calculator. Detailed information is available in the excel spreadsheets found in Appendix C.

Table 14 Power Generation GHG Combustion Emission Reductions Associated with Angeles Link Throughput Scenarios (million MT CO2e/yr)				
Throughput Scenario	2030	2035	2040	2045
Low	0.012	0.16	0.50	1.06
High	0.041	0.58	1.79	3.78

Table 14 offers a detailed account of the projected GHG emission reductions within the power generation sector under the Angeles Link Throughput Scenarios. For the Low Throughput Scenario, the table shows a ten-fold increase in GHG reductions over time, starting at 0.12 million MT CO2e in 2030 and increasing to 1.06 million MT CO2e by 2045. In the High Throughput Scenario, the GHG emission reductions begin at 0.41 million MT CO2e in 2030 and ramping up to 3.78 million MT CO2e by 2045.

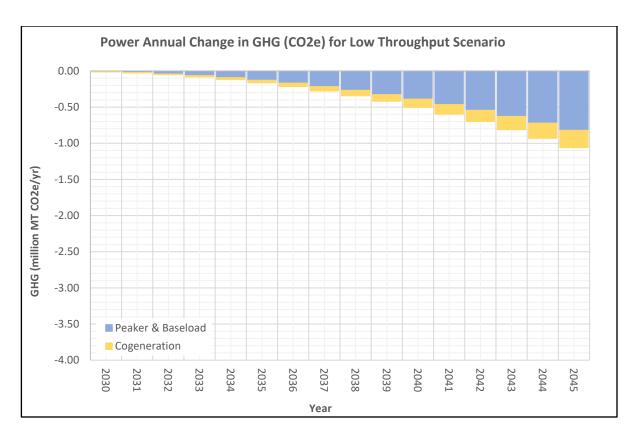


Figure 7A. Power Annual Change in GHG for Angeles Link - Low Throughput Scenario

Figure 7A displays the expected annual reductions in GHG emissions for the Power sector from 2030 to 2045. The stacked bars depict a year-over-year decrease in GHG emissions. This visualization highlights the large-scale impact of transitioning to hydrogen-fueled power generation, with cogeneration units also showing notable reductions. The clear decline in emissions over the years signifies the increasing role of clean hydrogen in achieving emissions targets within the Power sector.

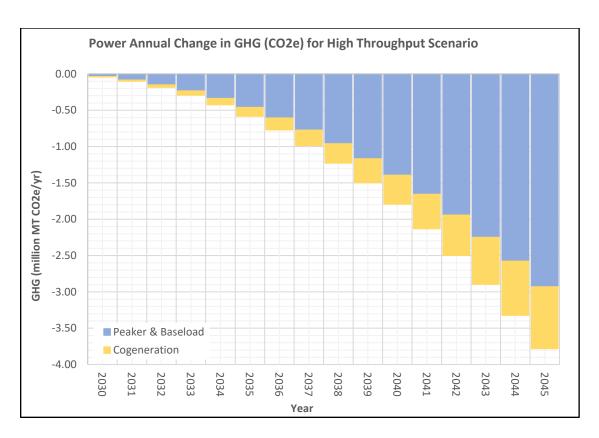


Figure 7B. Power Annual Change in GHG for Angeles Link - High Throughput Scenario

In Figure 7B, the estimated GHG reductions are showcased for the power sector with a less aggressive but steady transition towards hydrogen. The peaker baseload and cogeneration are again represented, showing a consistent trend of decreasing emissions over time. The color coding of the bars clearly shows the contributions from each type of generation unit to the overall reduction, with a trajectory pointing towards an environmental benefit by 2045. The chart underlines the potential of hydrogen to substantially lower GHG emissions even with lower adoption rates, indicating the effectiveness of hydrogen as a clean alternative to fossil fuels in Power generation.

7.2.3 Hard to Electrify Industrial

The results for the anticipated GHG emissions reductions associated with the Industrial sector based on the Angeles Link Low and High Throughput Scenario data in 2045 are that the Industrial sector accounts for 4% and 8% of overall GHG emissions reductions, respectively. The assumptions that were applied to develop the GHG emissions calculations include that hydrogen will displace natural gas as a fuel with increasing amounts over time (from 2030 to 2045). It should be noted that consistent with the Decision, Angeles Link is intended to transport clean renewable hydrogen, and any analysis of hydrogen blending refers strictly to "behind-the-meter" operations, not within SoCalGas control. This Study does not dictate if end users will blend hydrogen with

natural gas and makes assumptions regarding adoption rates based on currently available information regarding equipment and the anticipated evolution of adoption over time. Since only 100% clean renewable hydrogen will be delivered, to estimate GHG reductions at end users, assumptions regarding hydrogen adoption rates were made as shown in Tables 2A and 2B. The estimated emissions are based on these assumptions.

The potential for leakage at hard to electrify industrial end users such as when hydrogen is transferred from onsite storage or distribution to onsite hydrogen combustion equipment is acknowledged but was not quantified as part of this study.

For each emission source type identified, calculations to estimate emissions were prepared using the same two equations previously mentioned.

Fuel Throughput x Emissions Factor * GWP = GHG Emissions (equation 1)

GHG Emission Reductions = Fossil Fuel GHG Emissions – Hydrogen GHG Emissions (equation 2)

The first equation (equation 1) multiplies the quantity of fuel by the GHG emission factor specific to the fuel for each GHG pollutant. These pollutants are CO₂, CH₄, and N₂O for combustion of fossil fuels and N₂O for combustion of hydrogen. Each GHG has a specific fuel dependent emission factor and a unique GWP as shown in Table 1. The emissions for each of CO₂, CH₄, and N₂O are multiplied by their respective GWP and then summed to obtain the total GHG emissions in units of CO₂e.

The second equation (equation 2) calculates the GHG emission reductions in CO2e by subtracting the GHG emissions for hydrogen (either for N₂O from combustion of hydrogen or zero for hydrogen fuel cells) from the GHG emissions for combustion of displaced fossil fuels. The GHG emissions for combustion of hydrogen and for combustion of fossil fuels are both derived from equation 1.

As previously noted, for combustion of clean renewable hydrogen with GHG emissions comprised entirely of N₂O, since the GWP 20 and GWP 100 for N₂O are both 273, the expected impacts in both short term and long term should be similar.

Total emissions were calculated by summing totals for each equipment type and are shown in Table 15. Figures 8A and 8B provide graphs for the Angeles Link Low and High Throughput Scenarios, respectively below. The GHG emissions reductions predicted for the Low Throughput Scenario in 2045 are equivalent to about 35,500 homes' electricity use for one year per EPA Calculator. The GHG emissions reductions predicted for the High Throughput Scenario in 2045 are equivalent to about 144,000 homes' electricity use for one year per EPA Calculator. Detailed information is available in the excel spreadsheets found in Appendix C.

Table 15 Hard-to-Electrify Industrial GHG Combustion Emission Reductions Associated with Angeles Link Throughput Scenarios (million MT CO2e/yr)				
Throughput Scenario	2030	2035	2040	2045
Low	0.075	0.12	0.15	0.17
High	0.29	0.48	0.62	0.73

Table 15 quantifies the GHG emission reductions within the industrial sector influenced by the Angeles Link project under Low and High Throughput Scenarios. Starting in 2030, the Low Scenario estimates a reduction of 0.75 million MT CO2e, with a steady increase over time, reaching 0.18 million MT CO2e by 2045. The High Scenario projects more substantial reductions beginning at 0.29 million MT CO2e in 2030 and culminating at 0.73 million MT CO2e in 2045.

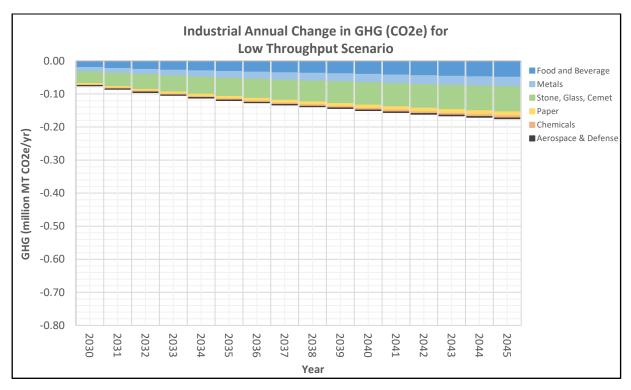


Figure 8A. Industrial Annual Change in GHG for Angeles Link - Low Throughput Scenario

Figure 8A depicts yearly reductions in GHG emissions across various industrial subsectors from 2030 to 2045. The largest decreases are seen in the food and beverage, and the stone/glass/cement sectors, shown by the deepest layers in the chart. As years progress, GHG emissions continue to fall, reflecting the increased adoption of hydrogen as a clean fuel alternative to natural gas, particularly in energy-intensive industries. By 2045, the emissions reduction is most pronounced, demonstrating the cumulative effect of the transition to hydrogen in high-demand scenarios.

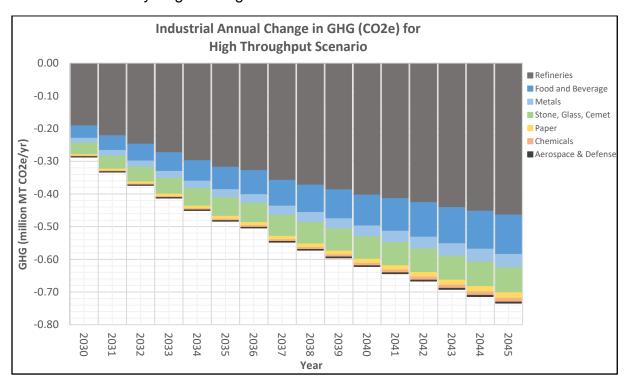


Figure 8B. Industrial Annual Change in GHG for Angeles Link - High Throughput Scenario

Figure 8B illustrates a conservative yet steady decline in GHG emissions within the industrial sector over the same period. In this scenario, refineries, food and beverage, and the stone/glass/cement sectors are also leading contributors to GHG reductions. Although the overall decrease in emissions is less aggressive than in the high throughput scenario, the continued year-over-year reductions indicate that even with a lower rate of hydrogen adoption, the industrial sector can achieve meaningful emissions reductions.

8 OVERALL RESULTS FOR ANGELES LINK THROUGHPUT SCENARIOS

Anticipated potential minor GHG emissions associated with new hydrogen infrastructure were added to the potential large anticipated GHG emissions reductions associated with potential end users of hydrogen as defined by the Demand Study. The total GHG emissions reductions projected for the Low Throughput Scenario in 2045 for end-users are equivalent to more than 874,000 homes' electricity use for one year per EPA Calculator. The total GHG emissions reductions predicted for the High Throughput Scenario in 2045 for end-users are equivalent to more than 1,760,000 homes' electricity use for one year per EPA Calculator. The results are provided in Table 16 and in Figures 9A and 9B below. Detailed information is available in the excel spreadsheets found in Appendix C.

In summary:

- Projected about 4.5 and 9 million metric tons of CO2e per year removed from SoCalGas territory geographic area by end users by 2045 in Angeles Link Low and High Throughput Scenarios.
- Projected new infrastructure GHG emissions are smaller than end-user reductions.
 - The highest potential infrastructure GHG emissions estimated are 0.17% and 0.25% the magnitude of overall end-user reductions for Angeles Link Low and High throughput scenarios, respectively, in 2045.
- Mobility GHG emissions are almost entirely eliminated with hydrogen substitution when fossil fuels are replaced with hydrogen fuel cells.
 - Mobility comprises 72.5% and 50.3% of overall GHG reductions for Angeles Link Low and High throughput scenarios, respectively, in 2045.
- Industrial and Power Generation GHG emissions are almost entirely eliminated when fossil fuels are replaced by hydrogen as a fuel in combustion equipment.
 - Power generation comprises 23.6% and 41.7% of overall GHG emissions reductions for Angeles Link Low and High throughput scenarios, respectively, in 2045.
 - Industrial comprises 3.9% and 8.1% of overall GHG emissions reductions for Angeles Link Low and High Throughput Scenarios, respectively, in 2045.

Table 16
Annual Change in GHG Emissions for Angeles Link Throughput Scenarios (MT CO₂e/yr)

Category	Through- put Scenario	2030	2035	2040	2045
	Low	-338,689	-1,306,066	-2,755,894	-4,491,919
End-Users	Medium	-859,849	-2,473,978	-4,878,512	-7,767,819
	High	-1,453,026	-3,358,957	-5,957,517	-9,073,521
	Max - Low	528	2,096	4,501	7,655
Infrastructure	Max – Medium	1,318	4,159	8,608	14,456
	Max - High	4,206	8,709	14,854	22,292
	Min – Low	0	0	0	0
	Min - Medium	0	0	0	0
	Min - High	0	0	0	0
	Low	-338,161	-1,303,970	-2,751,393	-4,484,264
Total	Medium	-858,531	-2,469,812	-4,869,898	-7,753,363
	High	-1,448,820	-3,350,248	-5,942,663	-9,051,228

Table 16 reflects the changes in GHG emissions due to the Angeles Link project, which indicate a decline in emissions from end-users, particularly in the high throughput scenario with more than 9 million MT CO2e reduction by 2045. The overall GHG reductions shown conservatively apply the high-end (max value) of the infrastructure emission estimates that range from zero to 22,292 MT/year in 2045 for the high throughput scenario. These figures represent a shift toward cleaner energy and indicate a major potential for emissions reduction through clean renewable hydrogen adoption. Infrastructure-related emissions, while present, are minimal compared to the gains from end-user reductions.

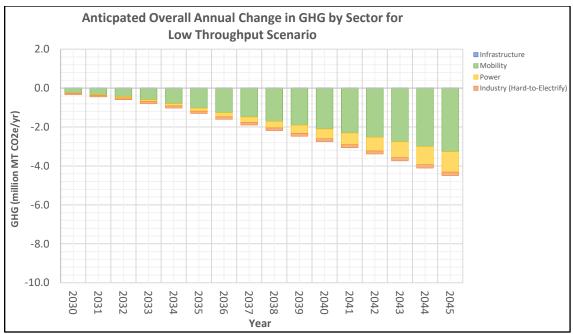


Figure 9A. Annual Change in GHG for Angeles Link - Low Throughput Scenario

In Figure 9A featuring the High Throughput Scenario, the stacked bar chart demonstrates a substantial decline in GHG emissions across all sectors, with the Mobility sector leading the reductions, followed by Power, and with Industry having the least, yet still notable GHG emission reductions. This visualizes a strategic and impactful cut in emissions through hydrogen adoption, especially in the Mobility sector.

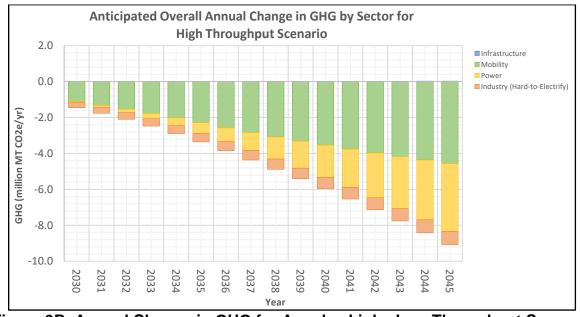


Figure 9B. Annual Change in GHG for Angeles Link - Low Throughput Scenario

In Figure 9B, for the Low Throughput Scenario, the trend is similar but with smaller reductions. Mobility still shows the most considerable decline, underscoring the role of cleaner transportation methods in reducing overall emissions. The consistent year-over-year decrease in all sectors reaffirms the value of even modest shifts toward clean renewable hydrogen for an environmental benefit.

9 HYDROGEN LEAKAGE IMPACT TO GHG REDUCTIONS

This Study broadens its scope to address concerns raised by stakeholders regarding hydrogen leakage, which represents a risk factor that could reduce a small percentage of the overall expected GHG reductions projected for Angeles Link. Addressing both direct and indirect GHG emissions, as raised by stakeholders, is essential for accurately assessing hydrogen's overall effectiveness as a means to achieve GHG reductions.

9.1 HYDROGEN AS INDIRECT GHG EMISSIONS

As outlined earlier in this document, this GHG report specifically estimates potential direct emissions of greenhouse gases such as CO₂, CH₄, and N₂O that can occur during fossil fuel or hydrogen combustion. It is important to note that hydrogen is not classified as a direct greenhouse gas by leading environmental organizations and governing bodies, including CARB, EPA, or the IPCC, due to the absence of globally recognized warming potentials. The research on global warming potential of hydrogen is evolving and there is not yet consensus among academic, regulatory, and climate organizations on the extent of the global warming impact of hydrogen. However, some analytical studies using atmospheric chemistry models estimate that hydrogen, if emitted to the atmosphere, will have an indirect global warming effect.⁹³

Similar to methane, hydrogen's climate impacts are short-lived, with near-term climate change impacts from hydrogen expected to be 3 to 8 times higher than long-term impacts. Additionally, hydrogen's indirect impact on methane in the atmosphere results in a longer atmospheric lifetime for methane which could result in climate effects for about 10 years longer.⁹⁴

Hydrogen's global warming impact may be caused by increasing methane residence time in the atmosphere, increasing production of tropospheric ozone (O₃) and altering stratospheric O₃, increasing the production of stratospheric water vapor, and changing the production of some aerosols.⁹⁵ These impacts are largely driven by the reaction of hydrogen and OH to form H₂O and H. OH is an atmospheric sink for methane and other atmospheric compounds.

Hydrogen combustion primarily results in the production of water vapor and very small amounts of N₂O may indirectly result from the nitrogen present in the combustion air at

⁹³ Bertagni, M.B., Pacala, S.W., Paulot, F. et al., 2022, Risk of the hydrogen economy for atmospheric methane. Nat Commun 13, 7706, https://doi.org/10.1038/s41467-022-35419-7

⁹⁴ Ocko, Ilissa and Hamburg, Steven, 2022, Climate consequences of hydrogen emissions. Atmospheric Chemistry and Physics, 2022. https://acp.copernicus.org/articles/22/9349/2022/

⁹⁵ Bertagni, M.B., et. al., 2022, Ibid.

specific temperatures. While water vapor is a greenhouse gas due to its ability to trap heat in the atmosphere, hydrogen combustion does not directly emit carbon-based greenhouse gases like CO₂ or CH₄, because hydrogen lacks carbon content. Therefore, the climate-related concerns associated with hydrogen primarily stem from its indirect effects rather than direct emissions. Key indirect effects of hydrogen combustion include:

- Hydroxyl Radical Reduction: Hydrogen can lower the concentration of hydroxyl radicals (OH) in the atmosphere. These radicals play a crucial role in breaking down methane, a greenhouse gas. When the levels of hydroxyl radicals are reduced, methane's atmospheric lifetime increases, which in turn amplifies its warming effect on the climate.
- Ozone Formation: When hydrogen is emitted, it can react with other compounds in the atmosphere under the influence of sunlight, leading to the formation of tropospheric ozone. This substance is not only a potent greenhouse gas but also a harmful air pollutant, contributing further to climate change.
- Water Vapor Impact: The oxidation of hydrogen leads to an increase in stratospheric water vapor, which can intensify the greenhouse effect. However, the impact of this increase is highly variable and complex to model accurately due to the intricate dynamics of the atmosphere.

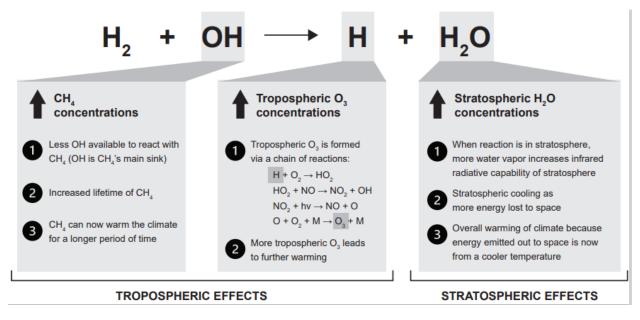


Figure 10. Estimated tropospheric and stratospheric effects of hydrogen

As shown in Figure 10,96 scientific literature has identified potential climate impact considerations: 1) reduction in available hydroxyl radicals to react with methane, potentially prolonging methane's lifetime in the atmosphere; 2) increased tropospheric concentrations of ozone; and 3) increased concentrations of water vapor.

Research on hydrogen's global warming potential has evolved, with key findings consolidated in recent studies. 97 98 Derwent's March 2023 article in the International Journal of Hydrogen Energy standardized earlier research, narrowing hydrogen's GWP to 7.1 to 9.3 over 100 years. 99 In contrast, Sand et al.'s June 2023 study, using five atmospheric chemistry models, proposed a GWP of 11.6 ± 2.8, focusing on emissions and potential infrastructure leakages. 100 This study highlighted the higher GWPs projected over shorter, 20-year horizons. 101 Notably, green hydrogen 102 could reduce GWPs by over 95% compared to fossil fuels over 20 to 100 years, based on leakage rates of 1 to 3%. 103 The primary uncertainties in developing a GWP for hydrogen continue to be the lack of data around the removal rate of atmospheric hydrogen by soil and potential future changes in atmospheric concentrations of other GHG such as methane. 104

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https://doi.org/10.1021/acs.est.3c09030

⁹⁶ Ocko, Ilissa and Hamburg, Steven, 2022, Ibid.

⁹⁷ Derwent, R.G., D.S., Stevenson, S.R Utembe, M.E. Jenkin, A.H. Khan, & D.E. Shallcross, 2020, Global modelling studies of hydrogen and its isotopomers using STOCHEM-CRI: Likely radiative forcing consequences of a future hydrogen economy, International Journal of Hydrogen Energy 45(15): 9211-9221, https://doi.org/10.1016/j.ijhydene.2020.01.125

⁹⁸ Field, R.A. and Derwent, 2021, Global warming consequences of replacing natural gas with hydrogen in the domestic energy sectors of future low-carbon economies in the United Kingdom and the United States of America, International Journal of Hydrogen Energy 46(58): 30190-30203, https://doi.org/10.1016/j.ijhydene.2021.06.120
⁹⁹ Derwent, R.G. et al. 2020, Global modelling studies of hydrogen, Ibid
¹⁰⁰ Sand, M., R.B. Skeie, M. Sandstad, S. Krishnan, G. Myhre, H. Bryant, R. Derwent, D. Hauglustaine, F. Paulot, M. Prather and D. Stevenson, 2023, A multi-model assessment of the Global Warming Potential of hydrogen, Communications Earth & Environment V.4 Article number: 203, https://doi.org/10.1038/s43247-023-00857-8
¹⁰¹ Paulot F., D. Paynter, V. Naik, S. Malyshev, R. Menzel, L. W. Horowitz, Global modeling of hydrogen using GFDL-AM4.1: Sensitivity of soil removal and radiative forcing, International Journal of Hydrogen Energy, 46, Issue 24, 2021, 13446-13460, ISSN 0360-3199, https://doi.org/10.1016/j.ijhydene.2021.01.088

¹⁰² Green hydrogen defined as produced by electrolysis using renewable electricity.

¹⁰³ Hauglustaine, D., F. Paulot, W. Collins, R. Derwent, M. Sand and O. Boucher, 2022, Climate benefit of a future hydrogen economy, Communications Earth & Environment 3 (Article number 295), https://www.nature.com/articles/s43247-022-00626-z#Abs1

¹⁰⁴ Sun, Tianyi, et al. "Climate Impacts of Hydrogen and Methane Emissions Can Considerably Reduce the Climate Benefits across Key Hydrogen Use Cases and Time Scales." Environmental Science & Technology, American Chemical Society, Feb. 2024.

Table 17 presents a range of GWP values for hydrogen from various studies. These values can be used for developing effective GHG emission rates for hydrogen leakage as CO₂e.

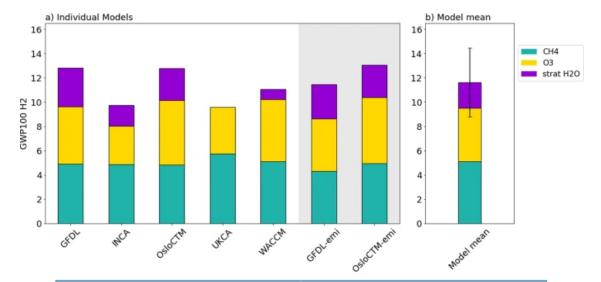
- GWP100 Range of Estimates: This column lists the GWP for a 100-year time horizon, which is the standard measure used to compare the impacts of different GHGs. The "+/-" values indicate the uncertainty or range in these estimates.
- GWP20 Range of Estimates: This column provides GWP values for a 20-year time horizon, which highlights the short-term climate impact of the gases. Not all studies provide a 20-year GWP.

Table 17 Summary of GWP 20 and GWP 100 Estimates for Hydrogen			
GWP100 Range of Estimates	GWP20 Range of Estimates	Date of Article	Article Authors
5 +/- 1		January 2020	R. G. Derwent, et al
3.3 +/- 1.4		August 2021	R.A. Field, R.G. Derwent
12.8 +/- 5.2	40.1 +/- 24.1	November 2022	D. Hauglustaine, et al
8 +/- 2		March 2023	R. G. Derwent
11.6 +/- 2.8	37.3 +/- 15.1	June 2023	M. Sand et al
11.5 +/- 6	34.8 +/- 19	October 2023	N. J. Warwick, et al

Understanding Multi-model Assessments of the Global Warming Potential of Hydrogen

To demonstrate that a number of data sources are typically evaluated to develop the values shown in Table 17 above, one row was selected (highlighted) and a deep-dive into the data was performed. For the row with the information from M. Sand et al. in June 2023¹⁰⁵, the authors evaluated the following information to develop the result in the study which estimates hydrogen's GWP100 to be 11.6, with a standard deviation of ±2.8 as shown in Table 17 above.

¹⁰⁵ Sand, M., et. al., 2023, Ibid.



GFDL Geophysical Fluid Dynamics Laboratory Model

OSLOCTM Oslo Chemical Transport Model

The GFDL model operates with a resolution of approximately 100 km and 49 vertical levels. This model conducts experiments focused on meteorological aspects with a set of experiments that involve a control run with fixed H2 and CH4 concentrations, and several scenarios with different levels of increased H2 and CH4 concentrations. It uses its own meteorology for simulations which are conducted over a period of 20 years, focusing on atmospheric dynamics and climate processes.

The **GFDL-emi** is a variant with a specific focus on emission scenarios. It retains the same resolution and vertical levels as the GFDL model but explores the impacts of increased H2 emissions (200 Tg yr-1) along with a significant increase in CH4 concentrations. This model's experiments span 50 years, making it particularly valuable for studying long-term climatic effects of emission changes.

OsloCTM features a resolution of roughly 2.25° x 2.25° with 60 vertical levels and conducts experiments under fixed H2 concentrations, along with increased H2 and CH4 scenarios. This model, using ECMWF OpenIFS 3 hr forecast data for meteorology, covers 20 years, focusing on the transport and transformation of chemical species in the atmosphere.

The **OsloCTM-emi** similarly maintains the same resolution and vertical levels and includes a scenario with increased H2 emissions (14 Tg yr-1). Its experiments also focus on the interaction between these emissions and atmospheric chemistry, using the same meteorological data and spanning 25 years.

INCA Interactive Chemistry and Aerosols

The INCA model utilizes a resolution of 2.5° × 1.25° with 39 vertical levels. It focuses on interactive chemistry, conducting experiments on present-day control scenarios with fixed H2 concentrations and simulations examining increases in H2 and CH4. INCA uses ECMWF OpenIFS 3 hr forecast data for meteorology and spans 20 years in simulation, emphasizing atmospheric chemistry and climate interactions.

UKCA United Kingdom Chemistry and Aerosols

The UKCA model operates with a resolution of 1.250° × 1.875° and 85 vertical levels. It performs experiments involving fixed H2 concentrations and a 10% increase in H2 and CH4 concentrations. The UKCA uses its own meteorology and runs simulations for 18 years, focusing on the study of atmospheric chemistry, aerosols, and their impact on climate.

WACCM Whole Atmosphere Community Climate Model

WACCM6 utilizes a resolution of 1.875° × 2.5° with 88 vertical levels and conducts experiments focusing on fixed H2 concentrations, and a 10% increase in both H2 and CH4 concentrations. It uses its own meteorological data and its simulation covers 20 years, integrating atmospheric chemistry with climate dynamics to model the whole atmosphere comprehensively.

The article "Climate Impacts of Hydrogen and Methane Emissions Can Considerably Reduce the Climate Benefits across Key Hydrogen Use Cases and Time Scales,"106 published recently in Environmental Science & Technology, explores the complexities surrounding the assessment of climate impacts associated with hydrogen energy systems. The article discusses the global warming potential of hydrogen over shorter periods, driven by its indirect effects on methane, tropospheric ozone, and stratospheric water vapor. Two methods were used to quantify the relative climate impacts of the pathway for hydrogen as compared to that of the fossil fuels being replaced. The first is technology warming potential (TWP)¹⁰⁷ which compares the cumulative radiative forcing from continuous emissions for the two pathways considering 10, 20, 50, and 100 year timeframes. The second method is a comparison of the total emissions in CO2e using GWP for the 20 and 100 year time scales. The results indicate that green hydrogen pathways consistently reduce warming impacts from fossil fuel technologies by more than 60% for all time scales regardless of emission rate; and when emission rates are around 1%, the climate benefits jump to greater than 90%. The article also mentions that displacement of fossil fuels with hydrogen may reduce other co-emitted pollutants such as carbon monoxide (CO) and N2O and volatile organic compounds (VOC) that are indirect GHGs that impact atmospheric chemistry. Finally, the article advocates for broader temporal analysis in climate impact assessments to capture both long-term and near-term effects and emphasizes the need for comprehensive assessments in hydrogen technology deployment to accurately evaluate its role in decarbonization strategies.

A detailed comparison of potential GHG emissions reductions of Angeles Link as compared to alternatives is beyond the scope of the Phase 1 feasibility analyses. The degree of analysis that could be reasonably completed at this feasibility stage to compare Angeles Link to other decarbonization pathways is included in the separate Alternatives Study, Cost Effectiveness Study, and Environmental Analysis.

The EDF blog post¹⁰⁸ "New research reaffirms hydrogen's impact on the climate, provides consensus," discusses that maintaining leakage of hydrogen at a minimum will depend on technological advancements related to direct measurement technologies that detect even small leaks. Minimal leakage will support the full advantages of the benefits of switching from fossil fuels to hydrogen.

https://blogs.edf.org/energyexchange/2023/07/19/new-research-reaffirms-hydrogens-impact-on-the-climate-provides-consensus/

¹⁰⁶ Sun, Tianyi, et al., 2024, Ibid.

¹⁰⁷ Alvarez, R. A., Pacala, S. W., Winebrake, J. J., Chameides, W. L., and Hamburg, S. P., 2012, Greater focus needed on methane leakage from natural gas infrastructure. PNAS 109, 6435–6440. doi:10.1073/pnas.1202407109

https://www.pnas.org/doi/full/10.1073/pnas.1202407109?doi=10.1073%2Fpnas.1202407109

¹⁰⁸ Ocko. I and S. Hamburg, EDF Blog, July 19, 2023, New research reaffirms hydrogen's impact on the climate, provides consensus,

The article "Climate Impacts of Hydrogen and Methane Emissions Can Considerably Reduce the Climate Benefits across Key Hydrogen Use Cases and Time Scales" also highlights hydrogen's potential for leakage. Additionally, the article "Wide Range in Estimates of Hydrogen Emissions from Infrastructure," published in Frontiers and recommended by stakeholders, notes that emission rates can vary widely across different components of the value chain, such as transmission and distribution pipelines and storage systems, reflecting variability.

The recent National Petroleum Council (NPC) Report¹¹¹ mentions that initial research shows that hydrogen leakage across the global value chain could reduce the climate benefits of hydrogen with greater climatic impact in the near term. Specifically, the report indicates that recent studies suggest that every 1% of value chain hydrogen leakage would reduce the climate benefit by 1.2% to 4.2% in the near term (20 years) and 0.4% to 1.3% in the long-term (100 years). The Report also suggests that to completely understand the climate impacts of hydrogen leakage, highly sensitive hydrogen direct measurement tools that are not yet widely available are needed to quantify leakage at real world facilities.

The article "Global modeling of hydrogen using GFDL-AM4.1: Sensitivity of soil removal and radiative forcing," mentions that hydrogen is the second most abundant reactive trace gas in the atmosphere with a global mean concentration of approximately 530 ppbv. Source of hydrogen are approximately 30% from fossil fuel combustion and 55% from formaldehyde photolysis. Over 80% of hydrogen removal from the atmosphere is attributed to soil uptake.¹¹²

Collectively, these studies underscore the importance of a comprehensive temporal analysis of GHG emissions from hydrogen sources. They advocate for the integration of these findings into policy and commercial decisions to minimize hydrogen's climate footprint. This includes designing infrastructure to minimize the potential for leakage and GHG emissions, enhancing the accuracy of direct hydrogen measurements, and expanding estimation methodologies to include short-term and long-term impacts. The ongoing research efforts are crucial for refining our understanding of hydrogen's role in climate dynamics and developing robust strategies to manage its emissions in the context of global climate goals. Given the variability observed across these models, scholarly research stresses the critical need for stringent controls on hydrogen leakage during its production, storage, and transport processes to mitigate its unintended climatic effects. These implications are being carefully considered and opportunities to minimize the potential for leakage is discussed in the parallel Phase One Leakage Study.

¹⁰⁹ Sun, Tianyi, et al., 2024, Ibid.

¹¹⁰ Alvarez, R. A., et. al., 2012, Ibid.

¹¹¹ National Petroleum Council, April 23, 2024, Harnessing Hydrogen: A Key Element of the U.S. Energy Future https://harnessinghydrogen.npc.org/downloads.php
¹¹² Paulot F., et. al., 2021, Ibid.

9.2 HYDROGEN LEAKAGE IMPACT ON PROJECTED OVERALL GHG EMISSIONS REDUCTIONS

In response to stakeholder input, the parallel Final Leakage Study Report provides a high-level estimate of potential leakage scenarios for general hydrogen infrastructure and for anticipated Angeles Link infrastructure. This estimation remains preliminary as detailed design and engineering data is not yet available for either the general or Angeles Link infrastructure.

9.2.1 General Infrastructure

For general infrastructure, the Final Leakage Study Report compiles leakage data across various stages of hydrogen infrastructure—including production, compression, aboveground storage, underground storage, and transmission—utilizing 25 distinct data points. From this compilation, a median leakage rate of 0.24% and an average rate of 0.92% were identified. These rates were then applied to estimate potential leakage across low, medium, and high throughput scenarios for Angeles Link. This modeling provides an initial quantitative framework for understanding potential losses due to leakage, albeit with uncertainty pending further infrastructure specification and development.

The Final Leakage Study Report provides high-level estimates of potential hydrogen leakage. These estimates range from 1,200 MT/yr for the conservative demand scenario using the median leakage estimate to 13,800 MT/yr for the ambitious demand scenario using the average leakage estimate.

To estimate the potential impact to climate change, a conservative method is used involving the range of estimated volumetric leakage rates, as well as the range of effective GWP 100 estimated for hydrogen from existing scientific studies. For the purposes of this analysis, the estimated amounts are assumed to be equivalent to GHG emissions. This assumption allows for evaluating the potential environmental impact relative to the GHG emission reduction estimates discussed in this Final GHG Study Report.

The Global Warming Potentials for hydrogen are used to convert the amount of leaked hydrogen into CO₂e. The GWP values specifically for a 100-year horizon range from 1.9 to 18, according to different studies summarized in Table 17. Using these GWP values, the potential GHG impact from leakage is calculated as follows:

- Lower Estimate: 1,200 MT/yr of hydrogen x 1.9 (minimum GWP100) = 2,280 MT CO₂e/yr
- Upper Estimate: 13,800 MT/yr of hydrogen x 18 (maximum GWP100) = 248,400 MT CO₂e/yr

These GHG values, ranging from 2,280 MT CO₂e/yr to 248,400 MT CO₂e/yr, are then compared to the projected overall GHG reductions from the project (end-user reductions minus infrastructure emissions), which are estimated at 9.0 MMTPY (as shown in Table ES-1). This comparison shows that the impact of hydrogen leakage on the overall GHG

reductions ranges from about 0.03% to 2.8%. In other words, this high-level methodology indicates that the impact from combustion associated with new hydrogen infrastructure to the predicted overall GHG emissions reductions would be very low (i.e., less than 3% for high throughput scenario).

9.2.2 Angeles Link Infrastructure

For Angeles Link infrastructure, the Final Leakage Study Report compiles leakage data for compression and transmission using 10 distinct data points. From this compilation, a median leakage rate of 0.17% and an average rate of 0.27% were identified. These rates were then applied to estimate potential leakage across low, medium, and high throughput scenarios for Angeles Link. This modeling provides an initial quantitative framework for understanding potential losses due to leakage, albeit with uncertainty pending further infrastructure specification and development.

The Final Leakage Study Report provides high-level estimates of potential hydrogen leakage. These estimates range from 850 MT/yr for the low throughput scenario using the median leakage estimate to 4,065 MT/yr for the high throughput scenario using the average leakage estimate.

To estimate the potential impact to climate change, a conservative method is used involving the range of estimated volumetric leakage rates, as well as the range of effective GWP 100 estimated for hydrogen from existing scientific studies. For the purpose of this analysis, the estimated amounts are assumed to be equivalent to GHG emissions. This assumption allows for evaluating the potential environmental impact relative to the GHG emission reduction estimates discussed in this Final GHG Study Report.

The Global Warming Potentials for hydrogen are used to convert the amount of leaked hydrogen into CO₂e. The GWP values specifically for a 100-year horizon range from 1.9 to 18, according to different studies summarized in Table 17. Using these GWP values, the potential GHG impact from leakage is calculated as follows:

- Lower Estimate: 850 MT/yr of hydrogen x 1.9 (minimum GWP100) = 1,615 MT CO₂e/yr
- Upper Estimate: 4,065 MT/yr of hydrogen x 18 (maximum GWP100) = 73,170 MT CO₂e/yr

These GHG values, ranging from 1,615 MT CO₂e/yr to 73,170 MT CO₂e/yr, are then compared to the projected overall GHG reductions from the project (end-user reductions minus infrastructure emissions), which are estimated at 9.0 MMTPY (as shown in Table ES-1). This comparison shows that the impact of hydrogen leakage on the overall GHG reductions ranges from about 0.02% to 0.8%. In other words, this high-level methodology indicates that the impact to the predicted overall GHG emissions reductions would be very low (i.e., less than 1% for high throughput scenario) when considering the addition of potential GHG emissions from the two leakage sectors evaluated in the parallel Final Leakage Study Report. Scientific studies indicate that maintaining value chain leakage

rates below 1% will increase climate benefits of clean renewable hydrogen to greater than 90%.¹¹³

As the project progresses, further refinements in infrastructure design, better information from end users, and technological advancements will likely provide more accurate data. This can help in more precisely quantifying the leakage and its impact on overall GHG emissions reductions. Additionally, further studies and data will allow a better understanding of the atmospheric effects of hydrogen, particularly through advanced modeling techniques.

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¹¹³ Sun, Tianyi, et al., 2024, Ibid.

10 CONCLUSIONS

The direct GHG combustion emission estimates were developed from data from both the Demand Study Demand Scenarios and Angeles Link Throughput Scenarios and are set forth in this Study. The GHG combustion emission estimates associated with Angeles Link set forth in this study are informative for Phase 1. This study acknowledges that based on available scientific research preliminarily reviewed, there is uncertainty about the potential tropospheric and atmospheric effects associated with leakage of hydrogen. Preliminary high-level estimates indicate that the potential for hydrogen leakage from infrastructure as compared to the overall GHG reductions may range from 0.03% to 2.8%. In other words, this high-level methodology indicates that the impact to the predicted overall GHG emissions reductions (end users minus infrastructure emissions) would be very low (i.e., less than 3% for high throughput scenario). The design details of the hydrogen infrastructure and the Angeles Link infrastructure as the project is further refined, and more details regarding third-party production, third-party storage, and end users, may further inform future quantification estimates of GHG emissions.

10.1 UNCERTAINTY

Global warming potentials from IPCC's AR6 report were utilized to calculate CO2e emissions within this study. While these AR6 values are the most recently published global warming potentials from the IPCC, it is likely that these values will continue to evolve as new science is published. There is uncertainty in how these global warming potential values will change in the future.

10.1.1 Infrastructure

Design of the new hydrogen infrastructure and Angeles Link infrastructure will be refined in future project stages, and as a result assumptions related to transmission of hydrogen, in addition to assumptions regarding third-party production and third-party storage, formed the basis of the GHG emissions estimates. Details regarding the hydrogen production process, and proportions of hydrogen intended to be produced from different methods, if more than one method is used, would reduce the uncertainty with respect to the estimated hydrogen production emissions estimates.

The evaluation of GHG emissions associated with water conveyance or transportation of materials such as biomass to production sites or biomass feed preparation are not included in this Study as these details are beyond the scope of the Phase 1 feasibility studies. For example, this Study assumed that biomass would be procured ready for combustion and removal of moisture would not be required on-site.

Estimates were developed based on hypothetical electrolysis, biomass gasification, and biogas in steam methane reforming scenarios where the combustion equipment is fueled by hydrogen. Details regarding quantity of hydrogen storage, location, and types (aboveground versus underground) of storage will inform refinement of these initial estimates. Additionally, distances and locations (primarily underground, and aboveground where necessary) of transmission pipelines will also provide details to refine the emission estimates. More accurate GHG emissions estimates related to infrastructure can be developed as designs evolve and details emerge.

10.1.2 End Users

As discussed previously in this report, there is a lack of data and clarity around a N_2O emissions factor for hydrogen combustion and therefore uncertainty regarding associated GHG emissions. There are many variables that may affect N_2O formation including different operating modes, lean combustion, control options, and lower combustion temperatures possible with hydrogen. Using a conservative value in these calculations may result in higher N_2O estimates than actual N_2O emissions. The conservative value of 2 ppm was selected for the calculations within this study developed based on information in the literature and incorporation of a margin of safety of 2, by doubling of the value.

There is uncertainty within the correction factor calculation approach for converting a mass basis emissions limitation for natural gas combustion to a mass basis emissions limitation for hydrogen combustion. One source of uncertainty arises from the lack of information around how the fuel type (including blended fuels) impacts the oxygen levels in the exhaust gas, and how that impacts the required oxygen correction factors in the conversion from volumetric to mass emissions for hydrogen combustion exhaust.

There is uncertainty in the correction factor calculation approach for converting natural gas emissions to a representative value for hydrogen. A source of uncertainty in this approach is the lack of information about how oxygen levels in the exhaust gas may vary between natural gas, hydrogen, and blends. In this study, it was assumed that a particular type of equipment combusting natural gas, hydrogen, or a blend would have the same exhaust oxygen concentration for all fuels. In-practice combustion characteristics for hydrogen turbines may result in higher or lower exhaust oxygen concentrations than what is observed in natural gas equipment. If exhaust oxygen concentration is higher for hydrogen than natural gas, emissions from hydrogen will increase compared to what is forecasted in this study.

Fossil fuel displacement volumes for diesel and gasoline from the Demand Study were utilized in the calculations within this study directly as provided for the mobility sector. Natural gas displaced by hydrogen and hydrogen demand projections were provided by the Demand Study and utilized in the calculations within this study as provided for the power generation and hard to electrify industrial sectors.

On-road vehicle GHG emissions factors were developed from the current EMFAC model, and off-road vehicle CO_2 emissions factors were developed from the current EMFAC model, while emissions factors from EPA were utilized for off-road vehicle CH_4 and N_2O emissions. The EMFAC model may be updated in the future, and EPA routinely updates their recommended emissions factors for GHG inventories document. It is uncertain how these emissions factors might change in the future.

10.2 KEY FINDINGS

Key findings for GHG emission reductions based on the Demand Study Scenarios are as follows.

- Projected up to nearly 17 and 36 million metric tons of CO2e per year removed from SoCalGas geographic service territory by end users by 2045 in conservative and ambitious demand scenarios of the Demand Study, respectively. The reductions are equivalent to the annual GHG emissions of approximately 45 and 96 natural gas fueled power plants, respectively per EPA Calculator.
- Mobility sector comprises 72.5% and 50.3% of overall GHG reductions based on the conservative and ambitious demand scenarios, respectively, in the year of 2045. The GHG reductions estimated for the conservative and ambitious demand scenarios in 2045 are equivalent to removing approximately 2.7 million and 4.3 million gasoline passenger vehicles off the roads per year, respectively.¹¹⁴
- Power generation and hard to electrify industrial sectors comprise 41.7% and 8.1% of the overall GHG reductions, respectively, based on the ambitious demand scenario.
- Power generation and hard to electrify industrial sectors comprise 23.6% and 3.9% of overall GHG reductions, respectively, based on the conservative demand scenario in 2045.
- Infrastructure GHG emissions are projected to be negligible when compared to overall emission reductions, at 0.17% and 0.25% of end-user reductions for conservative and ambitious demand scenarios, respectively.

Key Findings: Angeles Link Throughput Scenarios

The key findings for GHG emission reductions for Angeles Link Throughput Scenarios, which accounts for emissions from not just transmission of hydrogen, but also from third-party production and storage as well as end users, are as follows and are discussed further herein.

¹¹⁴ EPA, 2023a, GHG Calculator, Ibid.

- Projected about 4.5 and 9 MMT of CO2e per year removed from SoCalGas's geographic territory by end users by 2045 in Angeles Link Low and High Throughput Scenarios, respectively.
- Mobility sector comprises 72.5% and 50.3% of overall GHG reductions based on the Angeles Link Low and High Throughput value scenarios, respectively, in 2045. The GHG reductions estimated for the Low and High Throughput Scenarios in 2045 are equivalent to 725,000 and more than 1 million gasoline passenger vehicles driven for one year, respectively.¹¹⁵
- Power generation and hard to electrify industrial sectors comprise 41.7% and 8.1% of overall GHG emission reductions, respectively, based on the High Throughput Scenario.
- Power generation and hard to electrify industrial sectors comprise 23.6% and 3.9% of overall GHG emission reductions, respectively, based on the Low Throughput Scenario in 2045.
- Infrastructure GHG emissions are projected to be negligible when compared to overall emission reductions at 0.17% and 0.25% of end-user reductions for Low and High Throughput Scenarios, respectively.

Additional details related to both the Demand Scenarios and Angeles Link Throughput Scenarios are provided below.

2030 Ambitious Demand Scenario: In 2030, the Ambitious Demand Scenario predicts a reduction of about 6 MMTPY of CO2e due to hydrogen replacing fossil fuels. This reduction includes the emissions from producing, storing, and transmitting hydrogen. This amount of reduction is comparable to the energy use of about 740,000 homes for one year, according to the EPA's greenhouse gas (GHG) calculator. In terms of specific contributions, Angeles Link is expected to meet about 25% of the projected hydrogen demand identified in the Demand Study. This means that the specific GHG reductions attributed to Angeles Link under the High Throughput Scenario are estimated at about 1.45 million MT CO2e per year, which is equivalent to the energy use of approximately 189,000 homes for one year.

2045 Ambitious Demand Scenario: By 2045, the scenario estimates an overall reduction in CO2e emissions of about 36 MMTPY, again due to the displacement of fossil fuels by hydrogen. These reductions are equivalent to the annual electricity usage of over 4.6 million homes, as per the EPA's calculator. Angeles Link is expected to supply the same percentage (about 25%) of the total hydrogen demand in SoCalGas service territory, as projected in the Ambitious Demand Scenario. As a result, the GHG emissions

¹¹⁵ EPA, 2023a, GHG Calculator, Ibid.

¹¹⁶ EPA, 2023a, GHG Calculator, Ibid.

reductions specifically associated with Angeles Link in the High Throughput Scenario for 2045 are estimated at about 9.0 million MT CO2e per year. This would correspond to the energy use of roughly 1.1 million homes for one year.

Mobility Sector: In the Mobility sector, the estimated CO2e reductions under the ambitious demand scenario are approximately 4.4 million MT in 2030 and about 18 million MT by 2045. The reductions by 2045 are equivalent to the emissions from around 4.3 million gasoline-powered passenger vehicles driven for a year. The sector accounts for between 50% to 83% of total GHG emissions reductions, varying by scenario and year. The largest contributors are heavy-duty vehicles (55.5% in 2030 and 62.8% in 2045), followed by buses (33.6% in 2030 and 22.0% in 2045), and medium-duty vehicles (7.3% in 2030 and 9.7% in 2045). Reductions from on-road vehicles outweigh those from offroad vehicles, mainly due to the higher displacement of fossil fuels. In the High Throughput Scenario, the reductions for 2030 are about 1.1 million MT CO2e per year, increasing to about 4.6 million MT CO2e by 2045. The 2045 reductions would be equivalent to the emissions from 1 million gasoline-powered vehicles driven for a year.

Power Generation Sector: In the Power Generation sector, it's projected that by 2030, there could be a reduction of 0.16 million MT of CO2e under the ambitious demand scenario, and by 2045, this could increase to about 15 million MT CO2e. Over 78% of these reductions are expected from the peaker and baseload plant sub-sectors in all years under this scenario with the remaining reductions attributable to the cogeneration sub-sector. By 2045, these reductions are equivalent to the yearly electricity consumption of approximately 1.9 million homes, according to the EPA's calculator. Under the High Throughput Scenario, the reductions are estimated at about 41,000 MT CO2e per year for 2030 and about 3.8 million MT CO2e per year by 2045. The reductions for 2045 under this scenario are comparable to the energy use of around 480,000 homes for one year.

Hard to Electrify Industrial Sectors: In the industrial sectors that are difficult to electrify, the estimated CO2e reductions under the ambitious demand scenario are around 1.1 million MT in 2030 and could rise to about 2.9 million MT by 2045. The 2045 reductions would be equal to the annual electricity usage of about 365,000 homes. In this scenario, refineries are the largest contributors, accounting for 65.5% of reductions in 2030, followed by the Food and Beverage sector (13.4%), Stone, Glass, and Cement (12.1%), and Metals (5.3%). Please note that refineries are only considered in the Ambitious Demand Scenario and refineries comprise about one-quarter of the Demand in this scenario. These percentages remain consistent from 2030 to 2045. In the High Throughput Scenario, the reductions are estimated at about 290,000 MT CO2e per year for 2030 and about 730,000 MT CO2e per year by 2045. The 2045 reductions equate to the energy use of around 96,000 homes for one year.

Hydrogen Infrastructure Emissions: Emissions associated with new hydrogen infrastructure are evaluated. The results of the conservative estimate prepared represent a small fraction of the emissions reductions achieved by end-users adopting hydrogen in the study region.

Specifically, in the Ambitious Demand Scenario:

- By 2030, emissions from the new hydrogen infrastructure are estimated at about 16,600 MT of CO2e per year. This accounts for 0.29% of total CO2e reductions expected from end-users based on hydrogen usage projections.
- By 2045, these emissions increase to about 87,900 MT per year of CO2e, which constitutes 0.25% of the total CO2e reductions from end-users. This accounts for 0.25% of total CO2e reductions expected from end-users based on hydrogen usage projections.

For Angeles Link, under the High Throughput Scenario:

- In 2030, the estimated emissions attributed to the new infrastructure are estimated to be around 4,200 MT of CO2e per year. This accounts for 0.29% of total CO2e reductions expected from end-users based on hydrogen usage projections.
- By 2045, this figure is projected to rise to 22,300 MT of CO2e per year. This
 accounts for 0.25% of total CO2e reductions expected from end-users based on
 hydrogen usage projections.

11 STAKEHOLDER FEEDBACK

SoCalGas presented opportunities for the PAG and CBOSG to provide feedback at four key milestones during the course of conducting this study: (1) the draft description of the Scope of Work, (2) the draft Technical Approach, (3) Preliminary Data and Findings, and (4) the Draft Reports. These milestones were selected because they are critical points at which relevant feedback can meaningfully influence the study.

Table 18 Key Milestone Dates			
Milestone	Date Provided to PAG/CBOSG	Comment Due Date	Responses to Comments in Quarterly Report ¹
1. Scope of Work	7/6/2023	7/31/2023	Q3 2023
2. Technical Approach	9/7/2023	10/20/2023	Q4 2023
Preliminary Data and Findings	2/27/2024	3/29/2024	Q1 2024
4. Draft Report	7/10/2024	8/7/2024	Q3 2024

Feedback provided at the PAG/CBOSG meetings is memorialized in the transcripts of the meeting. Written feedback received is included in the quarterly reports, along with responses. Meeting transcripts are also included in the quarterly reports. The quarterly reports are submitted to the CPUC and are published on SoCalGas's website.

Feedback was incorporated as applicable at each milestone throughout the progression of the study. Some feedback was not incorporated for various reasons, including feedback that was already within the study scope, feedback that was outside the scope of the Phase 1 Decision or feasibility study, and feedback that raises issues better suited for third parties to address.

In response to feedback received following SoCalGas's presentation of the Preliminary Findings and Data to the PAG/CBOSG, this Study includes an estimate of the impact to estimated GHG reductions of a preliminary high-level volumetric estimate of the potential for leakage from hydrogen infrastructure from the Leakage Study Report, as well as presenting a summary of the estimated Global Warming Potential (GWP) 100 and GWP 20 for hydrogen available in the literature.

A summary of stakeholder input that was incorporated throughout the development of the GHG Study and into this Final Report is provided in Table 19: Summary of Incorporated Stakeholder Feedback. All feedback received, whether incorporated into the study or not as described above, has been recorded in the quarterly reports, along with SoCalGas's responses. Additionally, some administrative and other minor corrections were made to the Final GHG Study Report for clarity.

Table 19 Summary of Incorporated Stakeholder Feedback		
Thematic Comments from PAG/CBOSG Members	Incorporation of and Response to Feedback	
Overall GHG Reductions Stakeholder indicated that hydrogen leakage should be considered in the GHG emissions impact calculations. They requested that volumetric leakage estimates and associated impacts to climate change be discussed and a volumetric analysis be included in the Leakage Study and GHG Study.	In response to stakeholder comments, the range of preliminary high-level volumetric estimates quantifying the potential for leakage, provided in the Leakage Study was used in the GHG Study to predict a high-level range of potential impacts to the estimated overall GHG reductions associated with general new hydrogen infrastructure and with Angeles Link infrastructure using the potential for leakage values found during a literature review. The results are provided in Section 9.3.	
Global Warming Potential Stakeholders requested an evaluation of the climate risks of projected GHG emissions and inquired about the type of evaluation that will be conducted to determine the indirect warming potential of hydrogen leakage. Stakeholders expressed interest in having the GHG Study prepared using both GWP 100 and GWP 20 values for hydrogen and examining climate impacts of different hydrogen leakage rates.	Although the IPCC has not assigned a GWP for hydrogen, scientific literature indicates that hydrogen behaves as an indirect GHG. In response to stakeholder comment, a summary of the estimated GWP 20 and GWP 100 values for hydrogen based on a literature review is now provided in Table 17.	
Carbon Intensity Stakeholders suggested that the GHG Study should include carbon intensity and	Consistent with stakeholder comments, the GHG Study evaluates direct GHG emissions associated with hydrogen	

Table 19 Summary of Incorporated Stakeholder Feedback

Thematic Comments from PAG/CBOSG Members

lifecycle emissions. There was a request to estimate GHG related to third-party production, specifically from water procurement, conveyance, and treatment; and from feed preparation and transport of biomass. Stakeholders also requested the inclusion of the carbon intensity of delivered hydrogen based on production and transport scenarios.

Incorporation of and Response to Feedback

combustion related to new infrastructure, specifically third-party production, third-party storage, and transmission of hydrogen, as well as GHG emissions reductions associated with displaced fossil fuels by end users in the mobility, power generation, and hard-to-electrify industrial sectors. While lifecycle assessments require a level of detail beyond the scope of this feasibility study and have not been included, a summary of carbon intensity information from the literature is provided in Appendix B.

Third-Party Production

Stakeholders requested clarification regarding assumptions and resulting GHG emissions associated with the three analyzed third-party production options – electrolysis, biomass gasification, and steam methane reforming.

In response to stakeholder feedback, the Study clarifies that an assumption was made that biomass would be procured ready for combustion and moisture removal would not be required on-site. The Study evaluated GHG associated with SMR using RNG as a feedstock and clean renewable hydrogen as a fuel for the heating equipment. Extensive details regarding GHG emissions associated with third-party production options have also been provided in Appendices A and B in response to this request.

Demand Study Assumptions

Stakeholders commented that the Demand Study assumptions focused too heavily on regulatory and policy decisions.

An explanation of the GHG Study's reliance on information from the Demand Study was added to this report in response to stakeholder comment. The GHG Study includes analysis based on the three scenarios from the Demand Study and the three scenarios of currently projected throughput for Angeles Link. The GHG Study explains that SoCalGas's Demand Study projections were based on

Table 19 Summary of Incorporated Stakeholder Feedback		
Thematic Comments from PAG/CBOSG Members	Incorporation of and Response to Feedback	
	independently developed assumptions and analysis of potential hydrogen uptake in the SoCalGas service territory. The Demand Study was peer reviewed by experts at third parties, including NREL, South Coast Air Quality Management District (SCAQMD), University of California Los Angeles (UCLA), UCI, and UC Davis (UCD).	
Hydrogen Blending Stakeholders had questions regarding the blending of natural gas with hydrogen in the Angeles Link pipelines.	In response to stakeholder comment, the document clarifies that since the CPUC has mandated that Angeles Link only deliver 100% clean renewable hydrogen, blending of hydrogen with natural gas, if any, would be done behind the meter at the end users' facilities, as discussed in Section 3.5.2.3.	
Decarbonization Pathways Stakeholders indicated that anticipated GHG emission reductions for the pipeline scenario should be evaluated with respect to optimization and relative efficiencies of other decarbonization pathways.	In response to stakeholder comment, Section 9.1 clarifies that a detailed comparison of potential GHG emissions reductions of Angeles Link compared to alternatives is beyond the scope of the Phase 1 feasibility analyses. The degree of analysis that could be reasonably completed at this feasibility stage to compare Angeles Link to other decarbonization pathways is included in the separate Alternatives Study, Cost Effectiveness Study, and Environmental Analysis.	
End Users Stakeholders expressed concerns that indicated that Angeles Link will not serve refueling stations and that there isn't	Consistent with stakeholder comments and as described in the Routing Analysis, SoCalGas's route selection process evaluates directional pathways that account for engineering, environmental,	

Table 19 Summary of Incorporated Stakeholder Feedback		
Thematic Comments from PAG/CBOSG Members	Incorporation of and Response to Feedback	
sufficient information regarding routing with respect to end user locations.	social, and environmental justice features along the four potential preferred routes. A final preferred route will be selected in Phase 2 of Angeles Link. This clarifying information is included in Section 5.2.	
Leakage at End Users Stakeholders requested an analysis of the potential for leakage associated with end users of hydrogen.	In response to stakeholder comments, additional information would be needed to expand the scope of the Leakage Study to project hydrogen leakage rates for each sub-sector within the three primary sectors of potential end-users (mobility, power generation, and hard-to-electrify industrial). This Phase 1 analysis was conducted using a top-down approach, at a high level rather than at a granular facility level and equipment specific level. The limited information found regarding potential leakage at end users was included in Global Response 2 in the Quarter 2 report and in Section 4.1.1 of the Leakage Study. Further investigation would be needed to evaluate whether any of the estimated values among the wide ranges would be appropriate predictors for Angeles Link end users.	
Methane Leakage Stakeholders commented that upstream methane emissions should be considered.	In response to stakeholder comments, evaluation of methane leakage in the hydrogen industry is outside the scope of this feasibility analysis, as discussed in the Executive Summary and Section 3.2.	
Project Construction Stakeholders suggested that GHG emissions from the construction of Angeles Link should be evaluated.	In response to stakeholder comments, Section 2 was updated to address the scope of the GHG Study and explains that project specific construction emissions will be evaluated as a part of	

Table 19 Summary of Incorporated Stakeholder Feedback		
Thematic Comments from PAG/CBOSG Members	Incorporation of and Response to Feedback	
	the CEQA/NEPA process which will be based on a defined project description that includes the pipeline route (the selection of which will occur as a part of a subsequent phase of Angeles Link), ancillary equipment, earthwork and construction equipment.	
Literature Review Several stakeholders provided reports and literature to review and incorporate into the GHG Study.	In response to stakeholder feedback, the Study includes a review of relevant literature provided by stakeholders the reference list has been updated accordingly.	

Summary of Literature Provided by Stakeholders

Specific literature provided has been evaluated and relevant information has been incorporated, as appropriate, including, but not limited to:

- AC Transit, Zero Emission Bus Transition Plan, 2022, <u>0162-22 ZEB</u> Transition Plan_052022_FNL.pdf (actransit.org)
- Bertagni, M.B., Pacala, S.W., Paulot, F. et al. Risk of the hydrogen economy for atmospheric methane, Nat Commun 13, 7706 (2022). https://doi.org/10.1038/s41467-022-35419-7
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- Sun, Tianyi, et al. "Climate Impacts of Hydrogen and Methane Emissions Can Considerably Reduce the Climate Benefits across Key Hydrogen Use Cases and Time Scales." Environmental Science & Technology, American Chemical Society, Feb. 2024, https://doi.org/10.1021/acs.est.3c09030

12 GLOSSARY

Anthropogenic causes - Anthropogenic causes are causes of environmental problems that are a result of human activities. Examples of anthropogenic causes are energy-related activities, such as combustion of fossil fuels in the electric utility and transportation sectors, and the anthropogenic greenhouse effect, which is due to greenhouse gases emitted by humans, leading to global warming.

Autoignition temperature – The minimum temperature that a substance mixed with air will ignite and burn without an ignition source.

Blended fuels – Blended fuels are mixtures of traditional and alternative fuels in varying percentages. Blends can be thought of as transitional fuels. The lowest-percentage blends are being marketed and introduced to work with current technologies while paving the way for future integration, in this case, eventual usage of 100% hydrogen fuel.

Carbon-based fuel (also includes fossil fuel) – Hydrocarbon materials of biological origin. Carbon-based fossil fuel includes decomposing plants and other organisms, buried beneath layers of sediment and rock. These fuels have taken millennia to become the carbon-rich deposits we now call fossil fuels. These fuels include coal, oil, and natural gas.

Clean renewable hydrogen – Clean renewable hydrogen is defined as hydrogen that does not exceed 4 kilograms of CO₂e produced on a lifecycle basis per kilogram of hydrogen produced and does not use fossil fuel in the hydrogen production process where fossil fuel is defined as a mixture of hydrocarbons including coal, petroleum, or natural gas, occurring in or extracted from underground deposits per Decision 22-12-055 dated December 15, 2022.

Cogeneration – Cogeneration is the use of a heat engine or power station to generate electricity and useful heat at the same time. Cogeneration is a more efficient use of fuel or heat, because otherwise-wasted heat from electricity generation is put to some productive use. These plants recover otherwise wasted thermal energy for heating.

Compressors – A compressor is a mechanical device that increases the pressure of a gas by reducing its volume. Compressors are similar to pumps: both increase the pressure on a fluid and both can transport the fluid through a pipe. The main distinction is that the focus of a compressor is to change the density or volume of the fluid, which is mostly only achievable on gases. Gases are compressible, while liquids are relatively incompressible, so compressors are rarely used for liquids. The main action of a pump is to pressurize and transport liquids.

Combustion units – A combustion unit generates mechanical power by combustion of a fuel. Combustion units are of two general types: internal combustion engines and external combustion units.

Decarbonize – Decarbonization can mean moving away from energy systems that produce carbon dioxide (CO₂) and other greenhouse gas emissions. Energy decarbonization involves shifting the entire energy system in an attempt to stop carbon emissions from entering the atmosphere before they are ever released — this involves decarbonizing power grids, decarbonizing supply chains, and utilizing carbon sequestration in the pursuit of net-zero emissions and a carbon-neutral global economy.

Density – the mass per unit volume of a substance.

Diffusivity – Diffusivity is a measure of the capability of a substance or energy to be diffused or to allow something to pass by diffusion. Diffusivity refers to the spreading of something or making it less concentrated.

Electrolyzer – An electrolyzer uses electrolysis as a method for carbon-free hydrogen production (green hydrogen) from renewable and nuclear resources. Electrolysis is the process of using electricity to split water into hydrogen and oxygen. This reaction takes place in an electrolyzer that can range in size from small, appliance-sized equipment that is well-suited for small-scale distributed hydrogen production to large-scale, central production facilities that could be tied directly to renewable or other non-greenhouse-gasemitting forms of electricity production.

End-users – An end-user uses the hydrogen delivered by Angeles Link.

Engine – a machine that converts thermal energy into useful work (e.g., electricity of shaft power) to produce force and motion.

Exhaust gas aftertreatment – a device that reduces exhaust emissions from combustion equipment such as turbines and engines. It cleans exhaust gases to ensure the engines meet emission regulations. The main function of an aftertreatment system is to reduce emissions post combustion.

External combustion – The process of combining heat, fuel, and oxygen without the use of a combustion chamber to produce thermal energy.

Feasibility study – A feasibility study is an assessment of the practicality of a proposed project plan or method. For example, asking "Is this feasible?" by analyzing implementation and operational factors.

Feedstock – Feedstock is the material that is used in some hydrogen production equipment such as renewable natural gas and biomass.

Flammability range – The range of air-to-fuel ratios for which a substance will burn when exposed to an ignition source. The low end of this range is "rich" combustion where excess fuel inhibits combustion. The high end of this range is "lean" combustion where excess air inhibits combustion.

Global Warming Potential (GWP) – Global warming potential (GWP) is a measure of how much infrared thermal radiation a greenhouse gas added to the atmosphere would

absorb over a given time frame, as a multiple of the radiation that would be absorbed by the same mass of added carbon dioxide (CO₂). GWP is 1 for CO₂. For other gases it depends on how strongly the gas absorbs infrared thermal radiation, how quickly the gas leaves the atmosphere, and the time frame being considered.

Green hydrogen – Green hydrogen is produced through water electrolysis process by employing renewable electricity. The reason it is called green is that there is no CO₂ emission during the production process. Water electrolysis is a process which uses electricity to decompose water into hydrogen gas and oxygen.

Heavy-duty transportation – Heavy-duty transportation includes flatbed trailers, wide load hauling, large trucks, and freight trucks.

Hydrogen – Hydrogen is a colorless, odorless, tasteless, flammable gaseous substance that is the simplest member of the family of chemical elements.

Hydrogen fuel cell - A hydrogen fuel cell is an electrochemical cell that produces a current that can work using a spontaneous redox reaction. The combination of the two half-cell potentials for the electrochemical reaction creates a positive potential for cells. In general, fuel cells are different from most batteries in that they require a continuous source of fuel and oxygen (usually from air) to sustain the chemical reaction, whereas in a battery the chemical energy usually comes from substances that are already present in the battery. Fuel cells can produce electricity continuously for as long as fuel and oxygen are supplied. The only byproduct of a hydrogen fuel cell is water vapor.

Ignition energy – The minimum energy required to initiate the self-sustained combustion of a substance.

Infrastructure – Infrastructure are the resources such as pipelines and compressors required for an activity such as transmission of hydrogen.

Internal combustion – The process of combining heat, fuel, and oxygen within a combustion chamber where the combustion gasses themselves are the working fluid.

Methane – Methane is a chemical compound with the chemical formula CH₄ (one carbon atom bonded to four hydrogen atoms). It is the main component of natural gas.

Methodology – Methodology is the general research strategy that outlines the way in which research is to be undertaken and, among other things, identifies the methods to be used in it. These methods, described in the methodology, define the means or modes of data collection or, sometimes, how a specific result is to be calculated.

 $N_2O - N_2O$ is nitrous oxide, a greenhouse gas commonly known as laughing gas or nitrous, and is a chemical compound, an oxide of nitrogen. At room temperature, it is a colorless non-flammable gas, and has a slightly sweet scent and taste.

NOx – NOx is shorthand for nitrogen oxides (comprised of NO and NO₂) which is an air pollutant subject to air quality regulations formed during combustion of fossil fuels and a precursor to ozone.

Reciprocating compressors – A reciprocating compressor uses a linear drive to move a piston or a diaphragm back and forth to compress a gas. This motion compresses the gas by reducing the volume it occupies. Reciprocating compressors are the most used compressors for applications that require a very high compression ratio (compression ratio is the ratio of the pressure at the outlet of the compressor over the pressure at the inlet of the compressor).

Refining – Refining is removing impurities or unwanted elements from a substance, typically as part of an industrial process.

Stationary source – A stationary source refers to a qualitative term used to describe any fixed emitter of air pollutants, such as power plants, oil refineries, and heavy industrial facilities.

Steam generating units – Industrial/commercial/institutional steam generating units are boilers that are capable of combusting over 10 million international British thermal units per hour (MMBtu/hr) of fuel. A boiler or steam generator is a device used to create steam by applying heat energy to water.

Stoichiometric ratios/calculations – Stoichiometric ratios/calculations are used to analyze the relationship between the weights of reactants and products before, during, and following chemical reactions. Stoichiometry is founded on the law of conservation of mass where the total mass of the reactants equals the total mass of the products, leading to the insight that the relations among quantities of reactants and products typically form a ratio of positive integers. This means that if the amounts of the separate reactants are known, then the amount of the product can be calculated. Conversely, if one reactant has a known quantity and the quantity of the products can be empirically determined, then the amount of the other reactants can also be calculated.

Throughput – Throughput is the amount of a product or service that is provided.

Turbines - A turbine is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful work. The work produced can be used for generating electrical power when combined with a generator. A turbine is a turbomachine with at least one moving part called a rotor assembly, which is a shaft or drum with blades attached. Moving fluid acts on the blades so that they move and impart rotational energy to the rotor. In a gas turbine, the turbine is driven by expansion of hot gases. In a steam turbine, expanding steam drives the turbine. The turbine can do mechanical work or be used to generate electricity.

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Appendix A: Development and Application of GHG Emission Factor for Hydrogen Combustion

Combustion of hydrogen is anticipated to have zero or potentially trace GHG emissions. To account for the potential N₂O emissions that may form during combustion since N₂O is a GHG, in the absence of published N₂O emissions factors for hydrogen combustion, the following approach was used to develop hydrogen emissions factors based on studies. Details regarding assumptions made to apply the N₂O emission factor are also discussed below.

Development of GHG Emission Factor

Studies evaluating the formation of N_2O from the combustion of hydrogen typically fall into two categories: modeling or direct measurement. For the modeling studies, various models, variable inputs, and boundary conditions are used to account for the unique properties of hydrogen and minimization of air pollutant emissions. Direct measurement studies addressing N_2O formation from the combustion of hydrogen are typically performed on equipment that was not originally designed to account for the unique combustive properties of hydrogen.

A paper published in the International Journal of Hydrogen Energy in 2017 by a team at UCI investigated whether N₂O emission could be formed and emitted by the combustion of various fuels that did not contain nitrogen. The study evaluated natural gas with up to 70% hydrogen added (by volume). The results indicated that direct N₂O emissions were observed in greater volumes during transient events such as ignition and blowoff. It also found that steady state combustion of hydrogen-enriched natural gas flames can lead to the direct emissions of N₂O when operated at very lean conditions, made possible by the stabilizing effects of hydrogen. The study measured N₂O concentrations at various fuel—air equivalence ratios, phi. The fuel—air equivalence ratio is defined as the ratio of the fuel-to-oxidizer ratio to the stoichiometric fuel-to-oxidizer ratio. If the fuel-air equivalence ratio is less than 1, the mixture is considered lean (air is in excess). The study compared the lean burnoff experimental measurements with GRI 3.0 and University of California San Diego (UCSD) chemical reaction mechanisms, ¹¹⁸ with the UCSD mechanism following the experimental trends. The USCD San Diego Mechanism is used for modeling combustion applications as a chemical-kinetic mechanism with 57 species

¹¹⁷ Colorado, A., V. McDonell and S. Samuelsen, 2017, Ibid.

¹¹⁸ University of California at San Diego, 2023, Chemical-Kinetic Mechanisms for Combustion Applications, University of California at San Diego Mechanical and Aerospace Engineering (Combustion Research), San Diego Mechanism web page, https://web.eng.ucsd.edu/mae/groups/combustion/mechanism.html

in 268 reactions. GRI 3.0 is a mechanism for modeling natural gas combustion, including 325 reactions and 53 species. As noted in this study, N_2O is rapidly consumed at high temperatures or when equivalence ratio is close to the stoichiometric point (ϕ = 1). Therefore, combustion parameters such as a higher ratio of air-to-fuel (leaner combustion) and lower combustion temperatures that are utilized to minimize the formation of NOx emissions from the combustion of hydrogen fuels may potentially have the opposite effect on direct N_2O emissions. These effects need to be studied further since hydrogen combustion allows for leaner mixtures and stable operation at lower temperatures.

In a white paper prepared by the National Energy Technology Laboratory (NETL), hydrogen combustion emissions are evaluated. Similar to other literature, it is noted that thermal NOx is the prevalent form of NOx emissions for most high-temperature combustion (higher than 1,500°C). It is noted that in regions of the flame where there is a lack of oxygen, N₂O can also be formed from the under-oxidation of nitrogen. N₂O formation through this intermediate mechanism during combustion is generally very rare compared to other NOx compounds according to the paper "A Literature Review of Hydrogen and Natural Gas Turbines: Current State of the Art with Regard to Performance and NOx Control." 121

A 1994 paper by Kramlich et al. indicates that in most nitrogen free gas fuel combustion systems the flame temperature is sufficiently high that any N_2O formed in the flame zone is destroyed before the gases are emitted.¹²²

A modeling study completed by Duan et al. published in 2017 studied the mechanisms for NOx formation in a hydrogen internal combustion engine under high load found that

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¹¹⁹ CERFACS (Centre Euorpéen de Recherche et de Formation Avancée en Calcul Scientifique), 2023, CANTERA User's Guide - Hydrogen/Air Combustion, https://cerfacs.fr/cantera/mechanisms/hydro.php

¹²⁰ Smith, G.P., D.M. Golden, M. Frenklach, N.W. Moriarty, B. Eiteneer, M. Goldenberg, C.T. Bowman, R.K. Hanson, S. Song, W.C. Gardiner, Jr., V.V. Lissianski, and Zhiwei, 2023, GRI-Mech 3.0 webpage, Qin http://www.me.berkeley.edu/gri_mech/

¹²¹ National Energy Technology Laboratory, 2022, A Literature Review of Hydrogen and Natural Gas Turbines: Current State of the Art with Regard to Performance and NOx Control, White Paper DOE/NETL-2022/3812, August 12,

 $[\]underline{https://www.netl.doe.gov/sites/default/files/publication/A-Literature-Review-of-Hydrogen-and-Natural-Gas-Turbines-081222.pdf}$

¹²² Kramlich, J.C. and W.P. Linak, 1994, Nitrous oxide behavior in the atmosphere, and in combustion and industrial systems, Progress in Energy and Combustion Science 20(2): 149-202,

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the N₂O concentration increased during the period of combustion. However, N₂O concentration at the end of the modeled process was less than 1 ppm. ¹²³

Summary of E	Table A-1 Summary of Experimental Data of Hydrogen Combustion by Fuel Type										
Fuel (Equipment)	Metric	Value	Units	Author							
H ₂ :NG Blend (Burner)	Experimental	0.55	ppm (wet)	Colorado et al., 2017							
H ₂ (HICE)	Model Transient	6	ppmvd	Duan et al., 2017							
H ₂ (HICE)	Model Typical	1	ppmvd	Duan et al., 2017							
H ₂ (Residential Boiler)	Experimental	0.41	ppmvd	Galbraith, 2023 ¹²⁴							

As discussed above, data on N_2O emissions from 100% hydrogen combustion is sparse. In the table above, experimental data for blended hydrogen fuel, N_2O modeled data, and experimental data for hydrogen combustion are summarized. While data was available for ignition and transient combustion, the focus was on establishing a N_2O emission factor for steady-state combustion to best reflect anticipated combustion emissions. In collaboration with UCI, an evaluation of the available data was conducted. An average of the experimental data including the standard deviation was considered, but in effort to avoid the potential of underestimating N_2O emissions, the worst-case modeling data was chosen as the basis for estimated N_2O emissions from hydrogen combustion. It was further decided to add an additional layer of conservatism by applying a margin of safety of two. This approach utilizes the best data currently available and the inclusion of a margin of safety accounts for the uncertainty and the limited dataset. The conclusion is that a N_2O emission factor of 2 ppmvd was used for this study.

https://www.gov.scot/publications/nitrous-oxide-emissions-associated-100-hydrogen-boilers/ [gov.scot]

Duan, J., F. liu, Z. Yang, B. Sun, W. Chen, and L. Wang, 2017, Study on the NOx emissions mechanism of an HICE under high load, International Journal of Hydrogen Energy 42(34): 22027-22035, https://doi.org/10.1016/j.ijhydene.2017.07.048

¹²⁴ Galbraith, John, 2023, Nitrous Oxide Emissions Associated with 100% Hydrogen Boilers: Research, Energy and Climate Change Directorate,

Application of GHG Emission Factor

The N₂O emission factor was used to estimate GHG from hydrogen combustion for the following:

- Infrastructure: Production, Storage, and Transmission
- End-Users: Mobility, Power Generation, and Hard to Electrify Industrial

Production

Electrolysis Powered by Renewable Electricity

The process of electrolysis is not a combustion process and therefore N2O emissions are zero.

Biomass Gasification

No method for calculating greenhouse gas emissions was identified for biomass gasification, nor were any directly measured emissions from the process. Based on the scientific literature, biomass gasification is likely a "carbon neutral" process and may have negative life cycle greenhouse gas emissions. 125 The reason is that growing biomass removes carbon dioxide from the atmosphere. It is assumed for the purposes of this study, that a "carbon neutral" source of biomass will be selected for the production of hydrogen to be distributed by Angeles Link. Therefore, no CO₂ or CH₄ emissions are assumed from the biomass gasification process. Biomass gasification is a controlled process involving heat, steam, and oxygen to convert biomass to hydrogen and other products without combustion, and it occurs at high temperatures greater than 700 degrees Celsius. As such, it was assumed that N2O formation during biomass gasification is negligible. However, very little scientific literature is available that addresses the potential formation of N₂O from biomass gasification. A study completed by Sikarwar et al. in 2016 notes that there is the potential for nitrogen contamination in the outlet of the biomass gasification system if there is fuel nitrogen is present. 126 For the purposes of this study, it was assumed that no nitrogen is contained in the biomass or any other fuel source, as hydrogen is the preferred fuel source within the Angeles Link supply chain. Therefore, for the purposes of this study, it was assumed that N₂O emissions from biomass gasification were negligible.

https://pubs.rsc.org/en/content/articlepdf/2016/ee/c6ee00935b

¹²⁵ Yaser, Khojasteh Salkuyeh, Bradley A. Saville, Heather L. MacLean, International Journal of Hydrogen Energy Volume 43, Issue 20, 17 May 2018, Pages 9514-9528, Techno-economic analysis and life cycle assessment of hydrogen production from different biomass gasification processes

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¹²⁶ Sikarwar, V.S., M. Zhao, P. Clough, J. Yao, X. Zhong, M. Zaki Memon, N. Shah, E.J. Anthony and P.S. Fennell, 2016, An overview of advances in biomass gasification, Energy and Environmental Science 9(10): 2927-3304,

The biomass gasification process requires dry biomass. It is possible to obtain biomass containing moisture that would require drying on-site. However, this is dependent on the biomass available in the area and the supply chain and procurement for the specific facility. Due to the level of uncertainty around whether on-site drying would be required for each specific biomass gasification facility, this study assumed that biomass would be procured ready to utilize and would not require moisture removal on-site.

The syngas formed through biomass gasification can potentially be utilized in steam reforming to obtain additional hydrogen from the remaining hydrocarbons. Biomass gasification using steam as the oxidizing agent can achieve efficiencies of up to 44%. Running the syngas through the steam reforming process improves the overall efficiency and converts any remaining hydrocarbons, primarily CH₄, to hydrogen.

SMR Utilizing RNG as Feedstock and Hydrogen as Fuel for Heat Generation

For the purposes of this study, it was assumed that renewable natural gas generated from dairy farms would be the feedstock for the SMR process. Renewable natural gas, as it is referred to in this study, is a useable feedstock for the SMR process as it generally has a methane content of 96% to 98%. Biomethane is a type of renewable natural gas which is typically developed by the anaerobic digestion of manure and/or food wastes at a dairy farm or similar facility. The anaerobic digestion of these waste products generates a gaseous and a liquid product. The gaseous product is known as biogas and is subsequently sent through a cleaning skid where pollutants and impurities are removed resulting in renewable natural gas. The liquid product is called digestate and may be used as fertilizer in agriculture.

Steam reforming of renewable natural gas does have the potential to produce direct GHG emissions. Potential point sources of direct GHG emissions from combustion within a hypothetical steam reforming process include a furnace or external combustion unit for heat generation and may include a flare for use during maintenance, upset, and startup/shutdown operations. Given that pure hydrogen will be used as fuel for the combustion process, there is no potential for the formation of CO_2 or CH_4 emissions from the combustion hydrogen within the SMR process. However, there is the potential for N_2O formation from the combustion of hydrogen.

To calculate N₂O emissions from the external combustion unit within the steam reforming process, a heat rating per unit of hydrogen produced was required. To estimate an appropriate heat rating for the steam reforming process, air permits for existing steam

 ¹²⁷ Rödl, A., C. Wulf, M. Kaltschmitt, 2018, Chapter 3 – Assessment of Selected Hydrogen Supply Chains—Factors Determining the Overall GHG Emissions in Hydrogen Supply Chains, Editor: C. Azzaro-Pantel, Academic Press, ISBN 9780128111970, https://doi.org/10.1016/B978-0-12-811197-0.00003-8
 ¹²⁸ EPA, 2024b, Renewable Natural Gas, https://www.epa.gov/lmop/renewable-natural-gas

methane reforming plants were reviewed. Only standalone SMR production facilities, external combustion units with a given heat rating rather than a "not-to-exceed", and facilities with no more than 2 external combustion units were reviewed.

The external combustion unit heat rating was compared against the plant hydrogen production capacity to develop a ratio of (MMBtu/hr) / (MMscf/day hydrogen production) ratio. For facilities where the plant hydrogen production capacity was not stated in the air permit, the facility hydrogen production capacity was gathered from the Pacific Northwest National Laboratory (PNNL) Hydrogen Analysis Resource Center North American Merchant Hydrogen Plant Production Capacity list. 129 Of these facilities considered, the highest (MMBtu/hr) / (MMscf/day hydrogen production) ratio was 3.71 MMBtu/hr per MMscf/day hydrogen production, and the average was 2.97 MMBtu/hr per MMscf/day hydrogen production. Three calculation cases were established, the maximum case using the average plus standard deviation for the ratio value (3.62 MMBtu/hr per MMscf/day H2 production), and the minimum case using the average minus the standard deviation for the ratio value (2.32 MMBtu/hr per MMscf/day H2 production).

For the purposes of this study, it is assumed that the external combustion unit would operate using hydrogen as fuel. It was assumed that some of the hydrogen produced by SMR would be siphoned off to use as fuel. As such, the volume of hydrogen produced was increased based on the amount of hydrogen that would be needed as fuel. To calculate the amount of hydrogen that would be required for use as fuel to generate the necessary total volume of hydrogen to meet end-user demand, the end-user demand was converted to an MMscf/day value and the maximum MMBtu/hr case of 3.62 MMBtu/hr per MMscf/day of hydrogen production was utilized to determine an appropriate MMBtu/hr rating to meet the demand. The MMBtu/hr values were multiplied by 8,760 (hours/year) to calculate the maximum annual MMBtu value for the hydrogen fuel. This annual MMBtu value was added to the end-user MMBtu demand values for each Demand Scenario to determine the total estimated annual production volumes.

A thermal efficiency was then applied to account for the fact that energy conversion is generally less than 100%. Research was completed to determine an appropriate thermal efficiency for a hydrogen fueled external combustion unit. No single value was discovered that would be representative for all hydrogen fueled external combustion units. Therefore, an average of multiple values was utilized. Values were obtained from DOE, a study completed by Gupalo et al. (2023), and an article by Gerardo Lara in Power

¹²⁹ Pacific Northwest National Laboratory (PNNL), 2016, North American Merchant Hydrogen Plant Production Capacities, data available on the Hydrogen Tools website, https://h2tools.org/hyarc/hydrogen-data/merchant-hydrogen-plant-capacities-north-america

Engineering.¹³⁰ ¹³¹ ¹³² Based on these articles, an efficiency of 73% was applied within this study.

Based on this methodology, roughly 38% of the hydrogen produced would be utilized as fuel for heat generation. As a note, this is likely a high estimate due to the use of only the maximum MMBtu/hr per MMscf/day hydrogen production ratio to determine fuel requirements. Utilizing the average case ratio yields a hydrogen use percent of total production of 31%, where the minimum case ratio yields 24%.

 N_2O emissions factors for external combustion were calculated utilizing the same process as outlined for stationary combustion end-users and the conservative value of 2 ppmvd (equivalent to 0.0265 kg CO_2e/kg H_2 combusted) was conservatively utilized for external combustion. The calculations within this study assumed that hydrogen was the fuel for the external combustion unit within the SMR operations.

Storage and Transmission

A two-step calculation approach was utilized to determine N₂O emissions from storage and transmission:

Estimate the total energy requirements to power compressors.

Calculate emissions from reciprocating engines and turbines associated with this energy.

The total energy requirement to power compressors for storage and transmission were developed from Bossel and Eliasson (2003)¹³³, a widely cited scientific paper. The first figure below, is a chart from this publication of compression energy (MJ/kg) to compress hydrogen at various pressures. Using this figure, the amount of energy required to store hydrogen can be calculated given a particular quantity of hydrogen (kg) and storage pressure (bar). The second chart from this this publication, the second figure below is a chart of the percentage of hydrogen that would be consumed to power compressors to transport hydrogen over a particular distance of pipeline. This figure can be used to calculate the amount of hydrogen (and therefore energy) required to transport hydrogen

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 ¹³⁰ DOE, Purchasing Energy-Efficient Large Commercial Boilers,
 https://www.energy.gov/femp/purchasing-energy-efficient-large-commercial-boilers
 ¹³¹ Gupalo, O., 2023, Study of the efficiency of using renewable hydrogen in heating equipment to reduce carbon dioxide emissions, from IOP Conference Series: Earth and Environmental Science, doi:10.1088/1755-1315/1156/1/012035,

https://iopscience.iop.org/article/10.1088/1755-1315/1156/1/012035/pdf

132 Lara, G., 2022, Boilers running on hydrogen: What you need to know, from Power Engineering, https://www.power-eng.com/hydrogen/boilers-running-on-hydrogen-what-you-need-to-know/

¹³³ Bossel, U., and B. Eliasson, 2003, Energy and the Hydrogen Economy, https://afdc.energy.gov/files/pdfs/hyd_economy_bossel_eliasson.pdf

a distance via pipeline. Using these two data sources, the total energy required to power compressors used for storage and transmission could be determined.

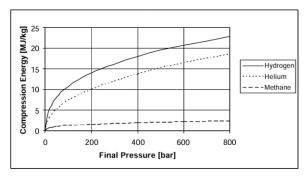


Figure A-1. Adiabatic Compression Work for Hydrogen, Helium, and Methane

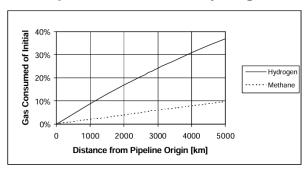


Figure A-2 Fraction of Gas Consumed to Energize the Pumps Corresponds to the Relative Energy Consumption of the Transported Gas

Based on data from Bossel and Eliasson (2003), the following information was required to determine N₂O emissions from transmission and third-party storage:

- Hydrogen storage pressure
- Hydrogen storage quantity
- Hydrogen transmission distance
- N₂O emissions factors for reciprocating engines and turbines

A range of possible N_2O emissions scenarios were evaluated related to new hydrogen infrastructure. A total of four scenarios were evaluated (per Demand Scenario) representing each combination of two (2) storage pressure scenarios, (2) compressor power source scenarios, and one (1) transmission distance scenarios. Annual N_2O emissions estimates were developed for each of these four storage and transmission scenarios for each of the three Demand Scenarios (conservative, moderate, and ambitious).

Storage pressure scenarios were developed based on storage pressures from Tahan (2022).¹³⁴ This publication presented a variety of hydrogen storage options at a high-level

¹³⁴ Tahan, M., 2022, Recent advances in hydrogen, Ibid

and their corresponding pressures. The highest and lowest pressures from this publication were utilized to represent the full range of potential storage pressures, and therefore storage compressor energy demands, from this project. These high and low storage pressure scenarios were 200 and 20 bar respectively, corresponding to storage underground and in spherical pressure vessels respectively.

A conservative N_2O emissions factor of 2 ppmvd (equivalent to 0.0265 kg CO_2e/kg H_2) was utilized to represent the potential for N_2O formation from the combustion of hydrogen with air. This same factor was used for reciprocating engines and turbines. Efficiency values for reciprocating engines and turbines were also sourced from scientific literature to convert fuel energy (MMBtu) to energy supplied by power sources for compression (MJ). These efficiency values were 60.3% and 51.9% for hydrogen fueled reciprocating engines and turbines respectively. A transmission distance of 450 miles of pipeline was assumed.

It was assumed that storage requirements would be similar between hydrogen and natural gas to accommodate fluctuations in fuel supply and demand. Data from 2022 from the "2023 California Gas Report Supplement" was used to estimate a California-specific value for the fraction of annual hydrogen demand that would be stored. From this source, it was determined that the average quantity of supplied natural gas in California during 2022 was 6,023 MMcf/day, which equates to approximately 2,198 Bcf/yr. This source also indicated that in 2022 California had a natural gas storage capacity of approximately 304 Bcf. Dividing these two values yielded a maximum (conservative) fraction of annual natural gas demand that would be stored: 13.8%. This value was applied to hydrogen; therefore, it was assumed that annually 13.8% of hydrogen demand would be stored.

Collectively, this information was used to determine the energy requirements for the compressors utilized in storage and transmission. N_2O emissions, as CO_2e , from storage and transmission were calculated by multiplying overall compressor energy demand by N_2O emissions factor by N_2O GWP (AR6).

Based on the figures above and information from the literature as summarized above, the compression needs for storage were determined to be 4 MJ/kg for storage pressure at 20 bar and 14 MJ/kg for storage pressure at 200 bar, Additionally, for transmission, the hydrogen that would be consumed by the reciprocating or centrifugal compressors, was

¹³⁵ Babayev, R., H.G. Im, A. Andersson, and B. Johansson, 2022, Hydrogen double compression-expansion engine (H2DCEE): A sustainable internal combustion engine with 60%+ brake thermal efficiency potential at 45 bar BMEP, Energy Conversion and Management 264: 115698, https://doi.org/10.1016/j.enconman.2022.115698
¹³⁶ Salam, Md A., Md. A. Ali Shaikh, and K. Ahmed, 2023, Green hydrogen based power generation prospect for sustainable development of Bangladesh using PEMFC and hydrogen gas turbine, Energy Reports 9: 3406-3416, https://doi.org/10.1016/j.egyr.2023.02.024

determined to be 0.0093% of the volume in the pipelines per kilometer of transmission via pipelines.

The following emission factors were developed for reciprocating engine and turbine compressors combusting clean renewable hydrogen:

- Hydrogen combusted (reciprocating engine & turbine compressors)
 - o 2.1673E-11 grams CO2e per gram H2
 - 0.0005988 MT CO2e per MMBtu
- Hydrogen transported (reciprocating engine & turbine compressors)
 - o 5.5886E-8 grams CO2e per gram H2 per kilometer
 - o 2.0228E-15 MT CO2e per MMBtu H2 per kilometer
- Hydrogen stored at 290 psi (reciprocating engine compressor)
 - o 0.01318 grams CO2e per gram H2
- Hydrogen stored at 2,900 psi (reciprocating engine compressor)
 - o 0.003765 grams CO2e per gram H2
- Hydrogen stored at 290 psi (turbine compressor)
 - o 0.01531 grams CO2e per gram H2
- Hydrogen stored at 2,900 psi (turbine compressor)
 - o 0.004374 grams CO2e per gram H2

Collectively, this information was used to determine the energy requirements for the compressors utilized in transmission and storage. NOx emissions were calculated by multiplying overall compressor energy demand by NOx emissions factor. NOx emissions were estimated for a total of 12 scenarios corresponding to 4 storage and transmission scenarios for each of the 3 Demand Scenarios. These 4 transmission and storage scenarios were based on each combination of two storage pressure scenarios, two pressure source scenarios, and one transmission distance scenarios. This was repeated for a total of 12 scenarios for each of the 3 Throughput Scenarios. These emissions scenarios are listed in the table below. In combination, these scenarios represent the range of possible transmission and storage characteristics and the corresponding NOx emissions.

Table A-2 Storage and Transmission Calculation Scenarios Evaluated

Scenario	Storage Pressure	Transmission Distance	Compressor Driver	Demand	
1	High (2,900 psi)	450 mi	Reciprocating Engine	Low	
2	Low (290 psi)	450 mi	Reciprocating Engine	Low	
3	High (2,900 psi)	450 mi	Turbine	Low	
4	Low (290 psi)	450 mi	mi Turbine		
5	High (2,900 psi)	450 mi	Reciprocating Engine	Moderate	
6	Low (290 psi)	450 mi	Reciprocating Engine	Moderate	
7	High (2,900 psi)	450 mi	Turbine	Moderate	
8	Low (290 psi)	450 mi	Turbine	Moderate	
9	High (2,900 psi)	450 mi	Reciprocating Engine	High	
10	Low (290 psi)	450 mi	Reciprocating Engine	High	
11	High (2,900 psi)	450 mi	Turbine	High	
12	Low (290 psi)	450 mi	Turbine	High	

Mobility

The EMFAC model does not include CH_4 and N_2O emissions data for off-road mobile vehicles. As such, additional research was completed to establish the most representative CH_4 and N_2O emissions factors for off-road mobile sources. The EPA Emission Factors for Greenhouse Gas Inventories document most recently modified on September 12, 2023 was selected as the most appropriate and representative source for CH_4 and N_2O emissions factors for off-road mobile sources. The document consolidates these emissions factors from the Annex tables in the EPA (2022) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. Table A-3 is a summary of the GHG emission factors that were developed for the mobility sector. Table A-4 summarizes the allocation of each mobility sub-sector to the two fossil fuels being displaced, diesel and gasoline, as a total for the fifteen-year study period.

Table A-3 GHG Emission Factors by Fuel Type for On-Road & Off-Road Vehicles

Vehicle Type	Fuel Type	CO ₂ (MT/gal)	CH ₄ (MT/gal)	N₂O (Mt/gal)
On-Road	On-Road Diesel		2.2078E-08	1.6000E-06
On-Road	Gasoline	0.0086	2.7499E-07	3.2282E-07
Off-Road	Diesel	0.0100	2.1960E-06	7.8800E-07
Off-Road	Gasoline	0.0065	1.7100E-06	1.0560E-06

Table A-4 Percentage of Total Fuel Type Displaced for each Mobility Sub-sector 2030 to 2045

Subsector	BAU % Diesel	BAU % Gasoline		
MDV	38.81%	61.19%		
HDV	99.99%	0.01%		
Bus	10.15%	89.85%		
Ag	92.14%	7.86%		
CHC	100.00%	0.00%		
CHE	27.55%	72.45%		
C&M	67.65%	32.35%		
GSE	18.28%	81.72%		

Power Generation and Hard to Electrify Industrial

The research completed for this study did not reveal any published hydrogen-specific GHG combustion emission factors. There is agreement within scientific literature that the formation of carbon GHGs (CO_2 and CH_4) will be zero from the combustion of hydrogen fuel. Reductions of CO_2 and CH_4 emissions will therefore be 100% when compared to the emissions calculated for the fossil fuels displaced by hydrogen. The combustion of hydrogen at lower temperatures does provide potential for the formation and emissions of N_2O . However, there is uncertainty around the contributing factors to the formation and N_2O emissions. This uncertainty was discussed in the N_2O development of emissions factor section above.

Appendix B: Carbon Intensity Evaluation of Third-Party Production Options

This evaluation sought to gather existing data regarding potential lifecycle GHG emissions associated with electrolysis powered by renewable electricity, biomass gasification, and SMR of RNG using hydrogen as fuel for any combustion units. Lifecycle GHG emissions associated with hydrogen production include direct (Scope 1) and indirect emissions (Scope 2 and Scope 3).

At the time of this study, details regarding third-party production for new hydrogen infrastructure are not complete, and therefore, it is not feasible to estimate Scope 3 greenhouse gas emissions for the specific processes. It is critical to note that none of the lifecycle carbon intensities referenced in this section were developed for Angeles Link, they are all hypothetical scenarios or based on existing facilities and therefore, are not necessarily representative of the third-party production options being evaluated. The carbon intensity values presented in this section were obtained from existing literature and do not represent the full range of potential carbon intensities for each hydrogen production methodology. Based on the assessment within this study and with the information currently available, it is not possible to determine which of the potential hydrogen production methodologies will best meet the CPUC definition for clean renewable hydrogen. However, based on existing data, it appears to be possible for all three of the methodologies being considered to meet the CPUC definition depending on operational variables.

Multiple studies found in the literature were prepared to assess the lifecycle carbon intensity (kg CO₂e/kg H₂ produced) for the various hydrogen production methodologies. While there is not a single standardized methodology and structure for Life Cycle Assessments (LCA), existing standards include International Organization for Standardization (ISO) 14040 and ISO 14044, and assessment methods such as ReCiPe2016.¹³⁷ ¹³⁸ Key variables for assessing carbon intensity for each methodology include the type and amount of feedstock required, type and amount of process fuels required, electricity required, water required for each of the various production methods, and the full supply chain for the required feedstock and fuel. The Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) Model¹³⁹ is a publicly available tool that estimates "well-to-gate" (WTG) or "well-to-wheel" carbon intensity for

¹³⁷ Cho, H.H., V. Strezov, and T.J. Evans, 2022, Environmental impact assessment of hydrogen production via steam methane reforming based on emissions data, Energy Reports 8: 13585-13595, https://doi.org/10.1016/j.egyr.2022.10.053

¹³⁸ Mehmeti, A., A. Angelis-Dimakis, G. Arampatzis, S.J. McPhail and S. Ulgiati, 2018, Life Cycle Assessment and Water Footprint of Hydrogen Production Methods: From Conventional to Emerging Technologies, Environments 5(2), https://doi.org/10.3390/environments5020024

Argonne National Laboratory, 2022a, GREET Model Detail: The Greenhouse gases, Regulated Emissions, and Energy use in Technologies Model (GREET) | Bioenergy Models | NREL

hundreds of pathways, including hydrogen production, and was also utilized to assess potential life cycle carbon intensities.

For this analysis, an evaluation was conducted to determine the "well-to-gate" carbon intensity for the following hydrogen production methods:

- Electrolysis powered by renewable electricity
- Biomass gasification
- Steam methane reforming (SMR) of feedstock renewable natural gas (biomethane)

Carbon intensity can be presented in multiple ways. For this study, emissions are presented in kilograms of carbon dioxide equivalent per kilograms of hydrogen produced (kg CO₂e/kg H₂) for comparison with the carbon intensity of 4 kg CO₂e/kg H₂ which is part of the CPUC definition of clean renewable hydrogen. The table below presents a summary of life cycle carbon intensities for the various production methodologies from existing literature which are discussed in more detail in the sections below.

Table B-1 Summary of Hydrogen Production Carbon Intensity Estimates from Existing Research

Production	Feedstock	Carbon Intensity Cradle-to- Gate (kg CO ₂ e/kg H2)	Study	
Electrolysis	Renewable Electricity	0	GREET	
Electrolysis	Solar-powered Electricity	2.3	Cho et al. 2022	
Biomass Gasification	Not Specified	1.61	GREET	
Biomass Gasification	Average of five biomass types	2.46	Cho et al. 2022	
Steam Methane Reforming	Landfill Gas	3.57	Cho et al. 2022	

Electrolysis Powered by Renewable Electricity

Per the GREET model, GHG emissions associated with electrolysis powered by renewable electricity are zero. GREET does not account for embedded carbon associated with solar panels or wind turbines. A study by Cho et al. published in 2022 found that solar-powered electrolysis may have a carbon intensity of 2.3 kg CO₂e/kg H₂ largely due to the manufacture of the solar cells. As demonstrated, carbon intensity for electrolysis powered by renewable electricity will vary based on how the required technology is manufactured, even when Scope 1 and Scope 2 emissions are zero.

¹⁴⁰ Cho, H.H. et al. 2022, Environmental impact assessments, Ibid

Research has also noted that electrolysis requires high quality water as a feedstock, which may require treatment on site potentially increasing the energy demand¹⁴¹ and impact overall carbon intensity.

Biomass Gasification

In the direct GHG emission calculations, we assume that biomass gasification is a "carbon neutral" process. Assuming no grid electricity usage or natural gas combustion, GREET was used to calculate indirect GHG emissions associated with biogas gasification, assuming that 36.3 kg of biomass is needed to produce 1 kg H₂.¹⁴² Approximately 1.61 kg CO₂e/kg H₂ is emitted by Scope 3 indirect sources (cultivation, harvesting, transport, drying, and chipping) for the biomass gasification process. Cho et. al (2022) calculated a cradle-to-gate carbon intensity of 2.46 kg CO₂e/kg H₂ for biomass gasification as an average of carbon intensity values from six different studies encompassing the following types of biomass: corn stover, unspecified forest residue, poplar, spruce, and willow.¹⁴³

The carbon intensity of biomass gasification can vary based on a variety of key inputs including, but not limited to, type of biomass feedstock, whether fossil energy is used in the biomass lifecycle, biomass transport, pre-treatment such as drying and chipping, and the use of synthetic fertilizers. Fossil energy may be used in the agricultural process such as diesel fuel in agricultural machinery and vehicles. The use of synthetic fertilizers during the biomass lifecycle can cause acidification which can impact the carbon intensity of that biomass.¹⁴⁴

Steam Methane Reforming

In the SMR process, hydrogen is produced through a reaction of gaseous methane and steam to produce a carbon monoxide (CO) – hydrogen synthetic gas (syngas). The CO in the syngas is then further reacted with steam to produce CO₂ and additional hydrogen. Note that if the steam is exported for other uses, a process credit may be calculated, assuming emissions avoidance from a natural gas boiler that would have produced an equal amount of steam. SMR being considered would use renewable natural gas as feedstock. The direct emissions calculations completed within this study assume that the produced hydrogen is utilized as fuel for heat generation in the SMR process. However, no studies were identified that assume the use of hydrogen as fuel.

Cho et al. evaluated cradle-to-gate carbon intensity for utilizing landfill gas as feedstock for the SMR process. They took an average of the carbon intensities from three landfill gas related studies, one of which specified an assumed leakage rate of 1% CH₄, while the other two did not specify leakage rate assumptions. The cradle-to-gate carbon intensity for SMR of landfill gas was estimated to be 3.57 kg CO₂e/kg H₂.¹⁴⁵ The value presented in this section may not appropriately represent SMR utilizing renewable natural gas as

¹⁴¹ Mehmeti, A.et al. 2018, Life Cycle Assessment, Ibid

¹⁴² Argonne National Laboratory, 2022b, Hydrogen Life-Cycle Analysis, Ibid

¹⁴³ Cho, H.H. et al. 2022, Environmental impact assessments, Ibid

¹⁴⁴ Cho, H.H. et al. 2022, Environmental impact assessments, Ibid

¹⁴⁵ Cho, H.H. et al. 2022, Environmental impact assessments, Ibid

feedstock since the renewable natural gas is typically derived from dairy farms rather than landfills. The average carbon intensity for manure dairy farms is considerably lower than landfill gas estimates found in the study, 3.57 kg CO2e/kg H_2 . The CI for manure dairy farms on average is several orders of magnitude lower at approximately -322 kg CO2e/kg H_2 . 146

Production efficiency is a highly impactful variable when determining lifecycle carbon intensity from any SMR process. Cho et al. (2022) found that direct carbon intensity from SMR (using natural gas as feedstock) decreased by 6% when the efficiency was increased by 5% and decreased by 11% when the efficiency was increased by 10%. A study by Nikolaidis and Poullikkas published in 2017 noted that the average production efficiency for existing SMR facilities ranges from 74% to 85%. Increasing the production efficiency of an SMR process reduces the carbon intensity.

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¹⁴⁶ CARB, 2024d, LCFS Pathway Certified Carbon Intensities, https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities

¹⁴⁷ Cho, H.H. et al. 2022, Environmental impact assessments, Ibid

¹⁴⁸ Nikolaidis, P. and A. Poullikkas, 2017, A comparative overview of hydrogen production processes, Renewable and Sustainable Energy Reviews 67: 597-611, https://doi.org/10.1016/j.rser.2016.09.044

Appendix C: GHG Emission Calculations Spreadsheets

APPENDIX C - GHG RESULTS, CALCULATIONS, AND DATA

DESCRIPTION

Appendix C contains select PDF printouts of the GHG results, calculations, and data.

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 $^{^{\}star}$ This tab is represented by a sample pdf calculation sheet depicting a specific calculation scenario.

Appendix C.1: Compiled Results

GHG Results, Calculations, and Data

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2 Tab Contents

This tab includes the acronym PRJ. This refers to the project (PRJ) scenario used in the calculation process (particularly for stationary sources). The PRJ scenario encompasses emissions for a sector or subsector including hydrogen adoption. For end-users, the PRJ scenarios are sector-wide representations of emissions, therefore PRJ scenario emissions will encompass emissions from sources that switched to hydrogen or blended fuels and emissions from sources that remained combusting fossil fuels. For stationary sources (industrial and power), PRJ scenarios were used to develop change in emissions results by subtracting the baseline from the project scenario emissions. For mobility, change in emissions were developed without considering a PRJ scenario, but this information was still developed and included for consistency within the end-user results. The key findings reported in this study were change in emissions (due to hydrogen adoption either at a market level or as supplied by Angeles Link). While PRJ scenario information was used to develop certain results, this information is secondary to the core results of this study.

6

Demand Scenario Hydrogen GHG Summary

8

10 Change in GHG (MT CO2e/yr) - Conservative

11			Year							
12	End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
13	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Industry (Hard-to-Electrify)	FoodBeverage	-74,243.7	-85,048.5	-94,982.6	-104,049.4	-112,271.5	-119,812.4	-126,710.9	-133,017.0
15	Industry (Hard-to-Electrify)	Metals	-48,792.3	-54,892.5	-60,582.7	-65,880.0	-70,832.2	-75,436.1	-79,729.2	-83,719.0
16	Industry (Hard-to-Electrify)	StoneGlassCement	-131,406.3	-148,786.0	-164,766.6	-179,402.2	-192,932.5	-205,261.5	-216,444.2	-226,876.4
17	Industry (Hard-to-Electrify)	Paper	-15,689.1	-18,610.1	-21,317.5	-23,820.0	-26,127.6	-28,251.2	-30,202.3	-31,993.1
18	Industry (Hard-to-Electrify)	Chemicals	-6,970.7	-8,327.1	-9,590.2	-10,764.1	-11,853.2	-12,862.2	-13,796.0	-14,659.5
19	Industry (Hard-to-Electrify)	AeroSpaceDefense	-2,501.9	-2,963.2	-3,389.4	-3,781.9	-4,142.4	-4,472.7	-4,774.7	-5,050.6
20	Power	PeakerBaseload	-37,204.2	-86,302.9	-155,040.9	-243,418.2	-351,434.8	-479,090.7	-632,108.3	-806,297.9
21	Power	Cogeneration	-5,740.6	-18,428.5	-37,101.8	-61,760.5	-92,404.8	-129,034.5	-173,141.6	-223,701.3
22	Mobility	MDV	-87,326.8	-124,521.2	-174,764.2	-239,324.7	-319,684.4	-416,968.9	-513,151.2	-606,636.5
23	Mobility	HDV	-402,881.0	-538,039.3	-761,776.2	-1,080,498.5	-1,501,295.2	-2,031,049.5	-2,529,066.5	-2,995,412.1
24	Mobility	Bus	-389,927.9	-508,728.1	-642,711.7	-790,219.7	-950,177.7	-1,121,481.1	-1,368,212.3	-1,603,369.0
25	Mobility	Agriculture	-7,333.8	-10,313.4	-13,477.0	-16,804.4	-20,279.0	-23,885.4	-28,520.3	-34,273.7
26	Mobility	СНС	-1,932.0	-3,132.7	-4,275.4	-5,333.2	-6,317.5	-17,257.0	-27,929.3	-36,593.4
27	Mobility	CHE	-29,804.3	-40,432.4	-50,398.6	-59,619.4	-68,256.7	-76,376.8	-86,661.2	-99,392.2
28	Mobility	Construction & Mining	-15,929.0	-24,162.4	-37,380.3	-55,468.3	-78,079.8	-104,929.2	-125,074.0	-146,702.1
29	Mobility	GSE	-3,846.5	-5,618.8	-7,919.4	-10,839.2	-14,387.2	-18,598.1	-22,178.1	-25,889.5
30	Total End-User	All End-User	-1,261,530.3	-1,678,306.8	-2,239,474.4	-2,950,983.9	-3,820,476.5	-4,864,767.0	-5,977,700.0	-7,073,583.4
31	Infrastructure	Storage (maximum)	237.0	315.8	424.0	562.7	733.8	941.4	1,157.1	1,372.3
33	Infrastructure	Production (maximum)	1,119.9	1,492.2	2,003.1	2,658.9	3,467.1	4,448.0	5,467.2	6,483.8
34	Total Infrastructure	All Infrastructure	1,965.7	2,619.1	3,515.8	4,666.8	6,085.4	7,807.1	9,595.9	11,380.1
35	Overall Project	Overall Project	-1,259,564.6	-1,675,687.7	-2,235,958.6	-2,946,317.1	-3,814,391.2	-4,856,959.9	-5,968,104.1	-7,062,203.2

	В	C	Q	R	S	T	U	V	W	X
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2 Tab Contents

This tab includes the acronym PRJ. This refers to the project (PRJ) scenario used in the calculation process (particularly for stationary sources). The PRJ scenario encompasses emissions for a sector or subsector including hydrogen adoption. For end-users, the PRJ scenarios are sector-wide representations of emissions, therefore PRJ scenario emissions will encompass emissions from sources that switched to hydrogen or blended fuels and emissions from sources that remained combusting fossil fuels. For stationary sources (industrial and power), PRJ scenarios were used to develop change in emissions results by subtracting the baseline from the project scenario emissions. For mobility, change in emissions were developed without considering a PRJ scenario, but this information was still developed and included for consistency within the end-user results. The key findings reported in this study were change in emissions (due to hydrogen adoption either at a market level or as supplied by Angeles Link). While PRJ scenario information was used to develop certain results, this information is secondary to the core results of this study.

7 Demand Scenario Hydrogen GHG Summary

10 Change in GHG (MT CO2e/yr) - Conservative

11			Year							
12 End-Use	r Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
13 Industry	(Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 Industry	(Hard-to-Electrify)	FoodBeverage	-138,642.4	-143,729.0	-151,927.4	-159,412.4	-166,245.6	-172,483.8	-178,179.3	-183,379.5
15 Industry	(Hard-to-Electrify)	Metals	-87,433.3	-90,879.6	-94,182.1	-97,256.9	-100,125.1	-102,803.4	-105,302.0	-107,456.3
16 Industry	(Hard-to-Electrify)	StoneGlassCement	-236,216.3	-244,698.8	-252,628.0	-259,918.9	-266,569.3	-272,666.6	-278,265.7	-283,375.5
17 Industry	(Hard-to-Electrify)	Paper	-33,635.5	-35,141.4	-37,529.8	-39,733.3	-41,766.5	-43,642.7	-45,374.3	-46,972.9
18 Industry	(Hard-to-Electrify)	Chemicals	-15,457.8	-16,195.7	-17,387.7	-18,495.0	-19,523.8	-20,479.9	-21,368.4	-22,194.2
19 Industry	(Hard-to-Electrify)	AeroSpaceDefense	-5,302.4	-5,532.0	-5,896.3	-6,231.4	-6,539.6	-6,823.1	-7,084.1	-7,324.2
20 Power		PeakerBaseload	-1,001,659.6	-1,218,193.4	-1,455,899.2	-1,729,274.1	-2,026,097.0	-2,346,368.2	-2,690,087.4	-3,057,254.9
21 Power		Cogeneration	-280,713.7	-344,178.6	-414,096.1	-494,612.7	-582,275.5	-677,084.6	-779,040.0	-888,141.6
22 Mobility	,	MDV	-698,108.3	-788,235.4	-876,712.0	-963,777.8	-1,048,769.4	-1,132,776.6	-1,214,073.5	-1,293,830.0
23 Mobility	,	HDV	-3,433,983.5	-3,848,370.3	-4,242,367.5	-4,693,030.6	-5,205,575.4	-5,778,954.4	-6,410,741.7	-7,098,317.5
24 Mobility	,	Bus	-1,822,461.9	-2,026,597.5	-2,216,888.3	-2,394,181.6	-2,561,013.1	-2,718,943.5	-2,867,154.3	-3,006,862.1
25 Mobility	,	Agriculture	-41,170.7	-49,225.6	-58,446.9	-67,680.7	-76,840.6	-85,916.7	-94,905.2	-103,802.7
26 Mobility	,	СНС	-43,303.6	-48,430.8	-52,334.5	-56,059.6	-59,814.3	-63,622.9	-67,471.4	-71,341.2
27 Mobility	,	CHE	-114,298.8	-131,449.4	-150,506.7	-169,668.6	-187,786.5	-204,912.0	-221,154.3	-236,617.5
28 Mobility	,	Construction & Mining	-166,420.5	-184,897.5	-202,779.9	-219,541.6	-235,509.9	-250,804.3	-265,550.0	-279,883.7
29 Mobility	,	GSE	-29,324.9	-32,498.3	-35,429.8	-37,581.8	-39,540.4	-41,341.6	-42,996.0	-44,514.4
30 Total End	d-User	All End-User	-8,148,133.3	-9,208,253.3	-10,265,012.2	-11,406,456.9	-12,623,992.0	-13,919,624.2	-15,288,747.6	-16,731,268.5
31 Infrastru	ıcture	Storage (maximum)	1,587.0	1,802.5	2,021.6	2,264.4	2,527.6	2,811.4	3,114.9	3,438.1
33 Infrastru	ıcture	Production (maximum)	7,498.3	8,516.7	9,551.8	10,699.1	11,942.7	13,283.4	14,717.6	16,244.7
34 Total Infr	rastructure	All Infrastructure	13,160.9	14,948.3	16,765.0	18,778.7	20,961.5	23,314.7	25,832.0	28,512.2
35 Overall P	Project	Overall Project	-8,134,972.5	-9,193,305.0	-10,248,247.1	-11,387,678.2	-12,603,030.5	-13,896,309.6	-15,262,915.6	-16,702,756.3

	В	С	I	J	К	L	М	N	0	Р
36		•								
37	Change in GHG (MT CO2	e/yr) - Moderate								
38			Year							
39	End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
40	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	Industry (Hard-to-Electrify)	FoodBeverage	-151,475.4	-177,881.4	-202,669.5	-226,098.5	-248,697.3	-270,322.7	-290,674.0	-310,798.4
42	Industry (Hard-to-Electrify)	Metals	-59,627.8	-67,616.6	-75,147.9	-82,184.0	-89,721.0	-96,655.5	-103,905.0	-110,682.9
43	Industry (Hard-to-Electrify)	StoneGlassCement	-136,325.1	-158,704.5	-177,276.2	-191,352.9	-209,803.5	-224,363.4	-233,431.5	-252,704.2
44	Industry (Hard-to-Electrify)	Paper	-17,647.6	-21,339.4	-24,861.1	-28,238.8	-31,486.3	-34,616.9	-37,598.6	-40,487.3
45	Industry (Hard-to-Electrify)	Chemicals	-7,946.3	-9,794.2	-11,660.9	-13,571.1	-15,532.4	-17,495.0	-19,480.1	-21,551.7
46	Industry (Hard-to-Electrify)	AeroSpaceDefense	-3,163.3	-3,861.2	-4,561.6	-5,202.3	-5,847.1	-6,467.1	-7,017.3	-7,567.6
47	Power	PeakerBaseload	-86,444.9	-200,526.8	-360,241.1	-565,587.9	-816,567.0	-1,113,178.6	-1,468,718.6	-1,873,452.3
48	Power	Cogeneration	-13,338.4	-42,819.0	-86,206.9	-143,502.1	-214,704.7	-299,814.6	-402,298.6	-519,775.3
49	Mobility	MDV	-175,108.0	-227,175.4	-292,497.5	-371,624.8	-465,477.2	-574,621.6	-680,454.4	-781,388.6
50	Mobility	HDV	-1,208,643.1	-1,462,952.1	-1,807,246.9	-2,247,497.2	-2,790,818.1	-3,443,602.7	-4,056,838.1	-4,631,721.9
51	Mobility	Bus	-805,961.9	-944,977.0	-1,089,036.0	-1,237,448.1	-1,390,127.3	-1,546,806.8	-1,788,550.7	-2,019,365.7
52	Mobility	Agriculture	-11,967.6	-16,464.2	-21,359.3	-26,634.7	-32,274.3	-38,262.4	-44,895.5	-52,194.1
53	Mobility	СНС	-2,415.1	-3,927.4	-5,378.7	-6,733.4	-8,003.8	-22,058.0	-35,768.1	-46,898.8
54	Mobility	CHE	-34,892.3	-46,634.3	-59,432.2	-73,109.2	-87,782.1	-103,455.0	-119,639.0	-136,500.0
55	Mobility	Construction & Mining	-41,493.5	-53,891.1	-69,436.4	-88,106.7	-109,720.7	-134,109.0	-151,861.8	-172,588.9
56	Mobility	GSE	-6,273.3	-8,628.2	-11,450.8	-14,815.6	-18,702.2	-23,126.9	-26,864.3	-30,767.6
58	Infrastructure	Storage (maximum)	510.5	650.8	828.7	1,045.4	1,305.6	1,611.3	1,935.8	2,272.4
59	Infrastructure	Transmission (maximum)	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8
60	Infrastructure	Production (maximum)	2,412.2	3,074.8	3,915.5	4,939.4	6,168.7	7,613.4	9,146.4	10,736.9
61	Total Infrastructure	All Infrastructure	4,233.8	5,396.7	6,872.3	8,669.5	10,827.1	13,362.8	16,053.5	18,845.0
62	Overall Project	Overall Project	-2,752,216.5	-3,433,167.8	-4,280,140.0	-5,298,222.3	-6,505,735.7	-7,912,466.5	-9,425,077.8	-10,958,832.7

	В	С	Q	R	S	Т	U	V	W	Х	
36		•									
37	Change in GHG (MT CO2e/yr) - Moderate										
38		Year									
39	End-User Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045	
40	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
41	Industry (Hard-to-Electrify)	FoodBeverage	-330,632.5	-349,543.3	-372,737.6	-395,102.3	-416,404.7	-436,915.8	-456,231.2	-474,488.0	
42	Industry (Hard-to-Electrify)	Metals	-117,378.5	-123,794.2	-130,526.1	-136,942.3	-143,351.9	-149,837.0	-155,958.9	-161,661.1	
43	Industry (Hard-to-Electrify)	StoneGlassCement	-261,150.4	-266,227.9	-270,465.0	-277,899.0	-283,524.7	-289,615.1	-296,463.6	-300,864.4	
44	Industry (Hard-to-Electrify)	Paper	-43,264.9	-46,008.5	-49,836.7	-53,556.7	-57,276.6	-60,779.7	-64,147.3	-67,380.5	
45	Industry (Hard-to-Electrify)	Chemicals	-23,662.5	-25,842.7	-28,934.7	-32,122.6	-35,365.1	-38,682.6	-42,044.8	-45,342.9	
46	Industry (Hard-to-Electrify)	AeroSpaceDefense	-8,070.3	-8,606.5	-9,383.6	-10,137.2	-10,875.5	-11,548.3	-12,216.2	-12,895.8	
47	Power	PeakerBaseload	-2,327,379.8	-2,830,501.1	-3,382,816.3	-4,018,009.2	-4,707,684.4	-5,451,841.9	-6,250,481.8	-7,103,604.0	
48	Power	Cogeneration	-652,244.8	-799,707.1	-962,162.1	-1,149,244.2	-1,352,930.9	-1,573,222.1	-1,810,117.8	-2,063,618.0	
49	Mobility	MDV	-878,315.2	-972,007.0	-1,062,184.6	-1,151,171.1	-1,238,333.1	-1,324,848.3	-1,408,789.3	-1,491,416.7	
50	Mobility	HDV	-5,173,313.2	-5,686,238.2	-6,175,446.8	-6,685,738.4	-7,220,535.1	-7,780,843.8	-8,366,218.8	-8,975,762.6	
51	Mobility	Bus	-2,235,092.6	-2,436,830.2	-2,625,568.6	-2,802,024.4	-2,968,824.7	-3,127,508.1	-3,276,980.1	-3,418,441.0	
52	Mobility	Agriculture	-60,157.1	-68,779.9	-78,055.8	-87,339.9	-96,575.5	-105,748.7	-114,849.7	-123,869.7	
53	Mobility	СНС	-55,519.9	-62,107.7	-67,123.7	-71,355.2	-75,078.7	-78,429.6	-81,492.1	-84,325.3	
54	Mobility	CHE	-153,809.9	-171,798.4	-190,199.2	-208,807.1	-226,490.0	-243,304.8	-259,350.3	-274,720.5	
55	Mobility	Construction & Mining	-192,014.7	-210,518.9	-228,550.5	-245,687.9	-262,286.0	-278,420.3	-294,160.9	-309,592.8	
56	Mobility	GSE	-34,384.6	-37,729.2	-40,821.0	-43,066.8	-45,110.3	-46,989.1	-48,713.7	-50,295.4	
58	Infrastructure	Storage (maximum)	2,615.4	2,968.0	3,334.9	3,737.8	4,165.3	4,618.7	5,097.4	5,600.7	
59	Infrastructure	Transmission (maximum)	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7	14,383.2	
	Infrastructure	Production (maximum)	12,357.3	14,023.7	15,757.1	17,660.7	19,680.6	21,822.8	24,084.8	26,462.7	
61	Total Infrastructure	All Infrastructure	21,689.1	24,614.0	27,656.5	30,997.5	34,542.8	38,302.8	42,272.9	46,446.6	
62	Overall Project	Overall Project	-12,490,317.2	-14,033,897.4	-15,606,334.9	-17,294,140.2	-19,060,994.1	-20,913,243.5	-22,847,229.9	-24,861,536.7	

		В	С	1	J	К	L	М	N	0	Р
Second	63										
Fig.	64	Change in GHG (MT CO2e/yr) - Ambitious									
To Incustry (Hard-to-Electrify) Refineries 7-54,5827 8-37,664.5 9-77,211.8 1,078,995.0 1,174,725.4 1,255,000.8 1,299,191.3 1,413,252.6 1,414.1	65			Year							
Sea Industry (Hard to Electrify)	66	End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
Section Continue	67	Industry (Hard-to-Electrify)	Refineries	-754,582.7	-873,646.5	-977,231.8	-1,078,995.0	-1,174,725.4	-1,255,060.8	-1,294,917.3	-1,413,520.3
	68	Industry (Hard-to-Electrify)	FoodBeverage	-151,475.4	-177,881.4	-202,669.5	-226,098.5	-248,697.3	-270,322.7	-290,674.0	-310,798.4
17,647.6 21,339.4 24,861.1 28,238.8 33,486.3 34,616.9 37,598.6 40,482 10,500 10,50	69	Industry (Hard-to-Electrify)	Metals	-59,627.8	-67,616.6	-75,147.9	-82,184.0	-89,721.0	-96,655.5	-103,905.0	-110,682.9
17	70	Industry (Hard-to-Electrify)	StoneGlassCement	-136,325.1	-158,704.5	-177,276.2	-191,352.9	-209,803.5	-224,363.4	-233,431.5	-252,704.2
13 Industry (Hard-to-Electrify)	71	Industry (Hard-to-Electrify)	Paper	-17,647.6	-21,339.4	-24,861.1	-28,238.8	-31,486.3	-34,616.9	-37,598.6	-40,487.3
Packer PeakerBaseload	72	Industry (Hard-to-Electrify)	Chemicals	-7,946.3	-9,794.2	-11,660.9	-13,571.1	-15,532.4	-17,495.0	-19,480.1	-21,551.7
To Power Cogeneration -21,686.2 -69,616.9 -140,158.7 -233,311.7 -349,075.8 -487,451.1 -654,073.8 -845,073.8 -84	73	Industry (Hard-to-Electrify)	AeroSpaceDefense	-3,163.3	-3,861.2	-4,561.6	-5,202.3	-5,847.1	-6,467.1	-7,017.3	-7,567.6
To Mobility MDV	74	Power		-140,545.7	-326,024.8	-585,695.0	-919,556.3	-1,327,608.8	-1,809,852.3	-2,387,903.9	-3,045,936.9
To Mobility	75	Power	Cogeneration	-21,686.2	-69,616.9	-140,158.7	-233,311.7	-349,075.8		-654,073.8	-845,072.4
78	76	Mobility	MDV	-325,218.8	-409,569.9	-504,249.2	-607,527.6	-718,437.2	-835,726.1	-946,962.4	-1,051,003.8
79 Mobility	77	Mobility	HDV	-2,464,055.3	-2,930,681.9	-3,463,300.4	-4,065,318.1	-4,742,326.1	-5,498,351.6	-6,206,793.7	-6,872,901.0
80 Mobility	78	Mobility	Bus	-1,491,446.1	-1,694,897.7	-1,872,940.7	-2,027,402.6	-2,160,973.3	-2,275,840.1	-2,487,425.3	-2,690,233.3
81 Mobility	79	Mobility	Agriculture	-18,261.5	-24,801.1	-31,924.0	-39,602.8	-47,812.7	-56,529.2	-65,420.5	-74,429.1
83 Mobility GSE	80	Mobility	СНС	-2,454.1	-4,148.0	-5,864.7	-7,552.1	-9,208.9	-26,996.8	-44,343.3	-58,429.1
84 Mobility	81	Mobility	CHE	-49,975.6	-65,697.2	-83,466.0	-103,016.3	-124,484.4	-147,851.7	-169,756.5	-190,305.9
Storage (maximum) 1,999.7 2,349.0 2,734.2 3,159.6 3,628.5 4,140.8 4,673.4 5,252 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,140.8 4,673.4 5,252 3,140.8 4,248.1 5,248.1	83	Mobility	GSE	-11,114.9	-14,776.1	-18,662.8	-22,796.3	-27,079.0	-31,475.8	-35,129.2	-39,014.0
86 Infrastructure Storage (maximum) 1,999.7 2,349.0 2,734.2 3,159.6 3,628.5 4,140.8 4,673.4 5,252 87 Infrastructure Transmission (maximum) 5,135.4 6,032.6 7,021.6 8,114.1 9,318.4 10,634.0 12,001.9 13,488 88 Infrastructure Production (maximum) 9,448.3 11,099.0 12,918.6 14,928.7 17,144.3 19,564.7 22,081.5 24,819 92 Overall Project All Infrastructure 16,583.4 19,480.6 22,674.4 26,202.4 30,091.2 34,339.4 38,756.9 34,561 92 Overall Project Overall Project -5,712,706.8 -6,924,940.9 -8,266,648.3 -9,754,249.7 -11,401,352.4 -13,210,053.8 -15,129,721.3 -17,183,908 93 Overall Project Vear <	84	Mobility	All Mobility Sub-sectors	-4,436,290.1	-5,235,936.0	-6,090,060.0	-7,001,941.4	-7,978,946.1	-9,042,108.5	-10,139,476.7	-11,179,148.6
87 Infrastructure Transmission (maximum) 5,135.4 6,032.6 7,021.6 8,114.1 9,318.4 10,634.0 12,001.9 13,489 88 Infrastructure Production (maximum) 9,448.3 11,099.0 12,918.6 14,928.7 17,144.3 19,564.7 22,081.5 24,819 24,8	85	Total End-User	All End-User	-5,729,290.2	-6,944,421.5	-8,289,322.8	-9,780,452.0	-11,431,443.6	-13,244,393.2	-15,168,478.1	-17,227,470.2
88 Infrastructure Production (maximum) 9,448.3 11,099.0 12,918.6 14,928.7 17,144.3 19,564.7 22,081.5 24,819.89 89 Total Infrastructure All Infrastructure 16,583.4 19,480.6 22,674.4 26,202.4 30,091.2 34,339.4 38,756.9 43,561.9 92 Overall Project Overall Project -5,712,706.8 -6,924,940.9 -8,266,648.3 -9,754,249.7 -11,401,352.4 -13,210,053.8 -15,129,721.3 -17,183,908.93.9 93 Uverall Project Overall Project -5,712,706.8 -6,924,940.9 -8,266,648.3 -9,754,249.7 -11,401,352.4 -13,210,053.8 -15,129,721.3 -17,183,908.9 94 GHG Summary Year 95 End-User Segment Sector 2030 2031 2032 2033 2034 2035 2036 203 96 GHG Change - Moderate (MT CQ Total -1,261,530.3 -1,678,306.8 -2,239,474.4 -2,950,983.9 -3,820,476.5 -4,864,767.0 -5,977,700.0 -7,073,583 96 GHG Change - Ambitious (MT CQ Total -5,729,290.2 -6	86	Infrastructure	Storage (maximum)	1,999.7	2,349.0	2,734.2	3,159.6	3,628.5	4,140.8	4,673.4	5,252.9
89 Total Infrastructure All Infrastructure 16,583.4 19,480.6 22,674.4 26,202.4 30,091.2 34,339.4 38,756.9 43,561 92 Overall Project Overall Project -5,712,706.8 -6,924,940.9 -8,266,648.3 -9,754,249.7 -11,401,352.4 -13,210,053.8 -15,129,721.3 -17,183,908 93 94 GHG Summary 95 Year 2030 2031 2032 2033 2034 2035 2036 2039 GHG Change - Conservative (MT (Total -1,261,530.3 -1,678,306.8 -2,239,474.4 -2,950,983.9 -3,820,476.5 -4,864,767.0 -5,977,700.0 -7,073,583 98 GHG Change - Ambitious (MT CO Total -5,729,290.2 -6,944,421.5 -8,289,322.8 -9,780,452.0 -11,431,443.6 -13,244,393.2 -15,168,478.1 -17,227,470 100 102 GHG Summary 103 Year 104 End-User Segment Sector 2030 2031 2032 2033 2034 2035 2036 203	87	Infrastructure	Transmission (maximum)	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0	12,001.9	13,489.9
92 Overall Project Overall Project -5,712,706.8 -6,924,940.9 -8,266,648.3 -9,754,249.7 -11,401,352.4 -13,210,053.8 -15,129,721.3 -17,183,908 -93	88	Infrastructure	Production (maximum)	9,448.3	11,099.0	12,918.6	14,928.7	17,144.3	19,564.7	22,081.5	24,819.2
93 94 GHG Summary 95	89	Total Infrastructure	All Infrastructure	16,583.4	19,480.6	22,674.4	26,202.4	30,091.2	34,339.4	38,756.9	43,561.9
Sector S	-	Overall Project	Overall Project	-5,712,706.8	-6,924,940.9	-8,266,648.3	-9,754,249.7	-11,401,352.4	-13,210,053.8	-15,129,721.3	-17,183,908.2
Sector Segment Sector	93										
Sector 2030 2031 2032 2033 2034 2035 2036	94	GHG Summary									
97 GHG Change - Conservative (MT Cotal 1,261,530.3 -1,678,306.8 -2,239,474.4 -2,950,983.9 -3,820,476.5 -4,864,767.0 -5,977,700.0 -7,073,583.9 GHG Change - Moderate (MT CO Total 2,762,723.7 -3,447,192.8 -4,298,463.0 -5,321,707.4 -6,535,264.9 -7,948,956.3 -9,467,995.7 -11,008,445.9 GHG Change - Ambitious (MT CO Total 5,729,290.2 -6,944,421.5 -8,289,322.8 -9,780,452.0 -11,431,443.6 -13,244,393.2 -15,168,478.1 -17,227,470.100 102 GHG Summary 103 Year 104 End-User Segment Sector 2030 2031 2032 2033 2034 2035 2036 203 2036 203 2036 2036 203 2036 2036	95			Year							
98 GHG Change - Moderate (MT CO Total	96	End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
99 GHG Change - Ambitious (MT CO Total -5,729,290.2 -6,944,421.5 -8,289,322.8 -9,780,452.0 -11,431,443.6 -13,244,393.2 -15,168,478.1 -17,227,470 -100	97	GHG Change - Conservative (MT C	Total	-1,261,530.3	-1,678,306.8	-2,239,474.4	-2,950,983.9	-3,820,476.5	, ,	-5,977,700.0	-7,073,583.4
100 102 GHG Summary Year 104 End-User Segment Sector 2030 2031 2032 2033 2034 2035 2036 2036 105 GHG Change - Conservative (millio Total) -1.3 -1.7 -2.2 -3.0 -3.8 -4.9 -6.0 -7 106 GHG Change - Moderate (million Total) -2.8 -3.4 -4.3 -5.3 -6.5 -7.9 -9.5 -11 107 GHG Change - Ambitious (million Total) -5.7 -6.9 -8.3 -9.8 -11.4 -13.2 -15.2 -15.2 -17	98	GHG Change - Moderate (MT CO2	Total	-2,762,723.7	-3,447,192.8	-4,298,463.0	-5,321,707.4	-6,535,264.9	-7,948,956.3	-9,467,995.7	-11,008,445.3
102 GHG Summary 103 Year	99	GHG Change - Ambitious (MT CO	Total	-5,729,290.2	-6,944,421.5	-8,289,322.8	-9,780,452.0	-11,431,443.6	-13,244,393.2	-15,168,478.1	-17,227,470.2
103 Year 104 End-User Segment Sector 2030 2031 2032 2033 2034 2035 2036 2036 105 GHG Change - Conservative (million Total -1.3 -1.7 -2.2 -3.0 -3.8 -4.9 -6.0 -7 106 GHG Change - Moderate (million Total -2.8 -3.4 -4.3 -5.3 -6.5 -7.9 -9.5 -11 107 GHG Change - Ambitious (million Total -5.7 -6.9 -8.3 -9.8 -11.4 -13.2 -15.2 -17	100										
104 End-User Segment Sector 2030 2031 2032 2033 2034 2035 2036 2037 105 GHG Change - Conservative (millior Total) -1.3 -1.7 -2.2 -3.0 -3.8 -4.9 -6.0 -7 106 GHG Change - Moderate (million Total) -2.8 -3.4 -4.3 -5.3 -6.5 -7.9 -9.5 -11 107 GHG Change - Ambitious (million Total) -5.7 -6.9 -8.3 -9.8 -11.4 -13.2 -15.2 -17	102	GHG Summary									
105 GHG Change - Conservative (millic Total -1.3 -1.7 -2.2 -3.0 -3.8 -4.9 -6.0 -7 106 GHG Change - Moderate (million Total -2.8 -3.4 -4.3 -5.3 -6.5 -7.9 -9.5 -11 107 GHG Change - Ambitious (million Total -5.7 -6.9 -8.3 -9.8 -11.4 -13.2 -15.2 -17	103			Year							
106 GHG Change - Moderate (million Total -2.8 -3.4 -4.3 -5.3 -6.5 -7.9 -9.5 -11 107 GHG Change - Ambitious (million Total -5.7 -6.9 -8.3 -9.8 -11.4 -13.2 -15.2 -17	104	End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
107 GHG Change - Ambitious (million Total -5.7 -6.9 -8.3 -9.8 -11.4 -13.2 -15.2 -17	105	GHG Change - Conservative (milli	Total	-1.3	-1.7	-2.2	-3.0	-3.8	-4.9	-6.0	-7.1
	106	GHG Change - Moderate (million	Total	-2.8	-3.4	-4.3	-5.3	-6.5	-7.9	-9.5	-11.0
100	107	GHG Change - Ambitious (million	Total	-5.7	-6.9	-8.3	-9.8	-11.4	-13.2	-15.2	-17.2
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64 Change in GI	HG (MT CO2e	e/yr) - Ambitious								
65			Year							
66 End-User Segme	ent	Sector	2038	2039	2040	2041	2042	2043	2044	2045
67 Industry (Hard-t	o-Electrify)	Refineries	-1,470,923.5	-1,526,202.2	-1,590,356.9	-1,632,117.5	-1,681,020.4	-1,740,466.4	-1,786,295.8	-1,831,512.7
68 Industry (Hard-t	o-Electrify)	FoodBeverage	-330,632.5	-349,543.3	-372,737.6	-395,102.3	-416,404.7	-436,915.8	-456,231.2	-474,488.0
69 Industry (Hard-te	o-Electrify)	Metals	-117,378.5	-123,794.2	-130,526.1	-136,942.3	-143,351.9	-149,837.0	-155,958.9	-161,661.1
70 Industry (Hard-t		StoneGlassCement	-261,150.4	-266,227.9	-270,465.0	-277,899.0	-283,524.7	-289,615.1	-296,463.6	-300,864.4
71 Industry (Hard-t	o-Electrify)	Paper	-43,264.9	-46,008.5	-49,836.7	-53,556.7	-57,276.6	-60,779.7	-64,147.3	-67,380.5
72 Industry (Hard-t	o-Electrify)	Chemicals	-23,662.5	-25,842.7	-28,934.7	-32,122.6	-35,365.1	-38,682.6	-42,044.8	-45,342.9
73 Industry (Hard-t	o-Electrify)	AeroSpaceDefense	-8,070.3	-8,606.5	-9,383.6	-10,137.2	-10,875.5	-11,548.3	-12,216.2	-12,895.8
74 Power		PeakerBaseload	-3,783,951.2	-4,601,946.8	-5,499,923.8	-6,532,646.9	-7,653,949.7	-8,863,832.0	-10,162,294.1	-11,549,335.7
75 Power		Cogeneration	-1,060,446.9	-1,300,197.1	-1,564,323.2	-1,868,489.2	-2,199,651.5	-2,557,810.1	-2,942,965.0	-3,355,116.3
76 Mobility		MDV	-1,148,995.7	-1,241,808.6	-1,329,178.3	-1,415,908.2	-1,501,386.9	-1,586,871.3	-1,670,192.2	-1,752,694.6
77 Mobility		HDV	-7,502,943.2	-8,102,397.2	-8,677,218.8	-9,232,419.3	-9,768,940.7	-10,290,025.4	-10,797,409.3	-11,292,094.1
78 Mobility		Bus	-2,881,174.1	-3,061,245.0	-3,231,107.1	-3,391,153.3	-3,543,976.3	-3,690,941.7	-3,830,489.7	-3,963,686.9
79 Mobility		Agriculture	-83,522.5	-92,672.5	-101,853.9	-111,043.1	-120,219.9	-129,365.0	-138,461.5	-147,493.7
80 Mobility		СНС	-69,343.4	-77,687.9	-84,045.7	-88,885.6	-92,565.8	-95,356.1	-97,459.6	-99,029.3
81 Mobility		CHE	-209,321.6	-227,217.2	-243,803.1	-260,802.7	-277,101.8	-292,758.7	-307,852.8	-322,458.9
83 Mobility		GSE	-42,624.4	-45,971.5	-49,071.1	-51,266.7	-53,263.8	-55,098.7	-56,780.9	-58,320.8
84 Mobility		All Mobility Sub-sectors	-12,159,479.1	-13,088,805.5	-13,974,044.7	-14,826,611.8	-15,649,738.5	-16,449,654.4	-17,224,643.0	-17,978,360.2
85 Total End-User		All End-User	-19,258,959.7	-21,337,174.7	-23,490,532.3	-25,765,625.5	-28,131,158.4	-30,599,141.6	-33,143,259.9	-35,776,957.6
86 Infrastructure		Storage (maximum)	5,832.4	6,432.9	7,062.3	7,706.2	8,382.1	9,092.6	9,830.5	10,599.2
87 Infrastructure		Transmission (maximum)	14,978.2	16,520.4	18,136.8	19,790.5	21,526.2	23,350.9	25,245.8	27,219.9
88 Infrastructure		Production (maximum)	27,557.4	30,394.8	33,368.7	36,411.2	39,604.5	42,961.8	46,448.1	50,079.9594
89 Total Infrastruct	ure	All Infrastructure	48,368.0	53,348.2	58,567.9	63,907.9	69,512.8	75,405.3	81,524.5	87,899.0
92 Overall Project		Overall Project	-19,210,591.8	-21,283,826.5	-23,431,964.4	-25,701,717.6	-28,061,645.6	-30,523,736.3	-33,061,735.4	-35,689,058.6
93										
94 GHG Summa	ry									
95			Year							
96 End-User Segme	ent	Sector	2038	2039	2040	2041	2042	2043	2044	2045
97 GHG Change - Co	onservative (MT	Total	-8,148,133.3	-9,208,253.3	-10,265,012.2	-11,406,456.9	-12,623,992.0	-13,919,624.2	-15,288,747.6	-16,731,268.5
98 GHG Change - M	loderate (MT CO	Total	-12,546,391.0	-14,096,240.6	-15,674,812.4	-17,368,204.4	-19,140,647.2	-20,998,535.3	-22,938,216.6	-24,958,278.7
99 GHG Change - A	mbitious (MT CO	Total	-19,258,959.7	-21,337,174.7	-23,490,532.3	-25,765,625.5	-28,131,158.4	-30,599,141.6	-33,143,259.9	-35,776,957.6
100						-			•	
102 GHG Summa	ry									
103			Year							
104 End-User Segme	ent	Sector	2038	2039	2040	2041	2042	2043	2044	2045
105 GHG Change - Co	onservative (milli	Total	-8.1	-9.2	-10.3	-11.4	-12.6	-13.9	-15.3	-16.7
106 GHG Change - M	loderate (million	Total	-12.5	-14.1	-15.7	-17.4	-19.1	-21.0	-22.9	-25.0
107 GHG Change - A	mbitious (million	Total	-19.3	-21.3	-23.5	-25.8	-28.1	-30.6	-33.1	-35.8
108	,	ı	ı							

В	С	I	J	K	L	М	N	0	Р
110 End-User Reductions Attr	ibutable to End-Use Sectors (MT CO2e/yr)							
111		Year							
112 End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
113 % Attributable to Mobility - Cons	ervative	74.4%	74.8%	75.6%	76.5%	77.4%	78.3%	78.6%	78.4%
114 % Attributable to Mobility - Mode	erate	82.8%	80.2%	78.1%	76.4%	75.0%	74.0%	72.9%	71.5%
115 % Attributable to Mobility - Ambi	tious	77.4%	75.4%	73.5%	71.6%	69.8%	68.3%	66.8%	64.9%
116 % Attributable to Industrial - Con	servative	22.2%	19.0%	15.8%	13.1%	10.9%	9.2%	7.9%	7.0%
117 % Attributable to Industrial - Mod	derate	13.6%	12.7%	11.5%	10.3%	9.2%	8.2%	7.3%	6.8%
118 % Attributable to Industrial - Amb	pitious	19.7%	18.9%	17.8%	16.6%	15.5%	14.4%	13.1%	12.5%
119 % Attributable to Power Gen - Co	nservative	3%	6%	9%	10%	12%	13%	13%	15%
120 % Attributable to Power Gen - Mo	oderate	4%	7%	10%	13%	16%	18%	20%	22%
121 % Attributable to Power Gen - An	nbitious	3%	6%	9%	12%	15%	17%	20%	23%
122			-						
123 Infrastructure as Percent	of End-User Reductions								
124		Year							
125 End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
126 % Storage/End-User Reductions	Ambitious - Max	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%
127 % Transmission/End-User Reduct	Ambitious - Max	-0.09%	-0.09%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%
128 % Production/End-User Reductio	Ambitious - Max	-0.16%	-0.16%	-0.16%	-0.15%	-0.15%	-0.15%	-0.15%	-0.14%
129 % All Infrastructure	Ambitious - Max	-0.29%	-0.28%	-0.27%	-0.27%	-0.26%	-0.26%	-0.26%	-0.25%
130									
131 Infrastructure as Percent	of End-User Reductions								
132		Year							
133 End-User Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
134 % Storage/End-User Reductions	Conservative - Max	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%
135 % Transmission/End-User Reduct	Conservative - Max	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%
136 % Production/End-User Reductio	Conservative - Max	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%
137 % All Infrastructure	Conservative - Max	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%	-0.16%
138		•						•	_

В	С	Q	R	S	Т	U	V	W	Х
110 End-User Reductions Attr	ibutable to End-Use Sectors (MT CO2e/yr)	-		<u>. </u>				
111		Year							
112 End-User Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
113 % Attributable to Mobility - Cons	ervative	77.9%	77.2%	76.3%	75.4%	74.6%	73.8%	73.2%	72.5%
114 % Attributable to Mobility - Mode	erate	70.0%	68.4%	66.8%	65.0%	63.4%	61.8%	60.4%	59.0%
115 % Attributable to Mobility - Ambi	tious	63.1%	61.3%	59.5%	57.5%	55.6%	53.8%	52.0%	50.3%
116 % Attributable to Industrial - Con	servative	6.3%	5.8%	5.5%	5.1%	4.8%	4.4%	4.2%	3.9%
117 % Attributable to Industrial - Mod	derate	6.3%	5.8%	5.5%	5.2%	4.9%	4.7%	4.5%	4.3%
118 % Attributable to Industrial - Amb	pitious	11.7%	11.0%	10.4%	9.8%	9.3%	8.9%	8.5%	8.1%
119 % Attributable to Power Gen - Co	nservative	16%	17%	18%	19%	21%	22%	23%	23.6%
120 % Attributable to Power Gen - Mo	oderate	24%	26%	28%	30%	32%	33%	35%	36.7%
121 % Attributable to Power Gen - An	nbitious	25%	28%	30%	33%	35%	37%	40%	41.7%
122									
123 Infrastructure as Percent	of End-User Reductions								
124		Year							
125 End-User Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
<u> </u>	Ambitious - Max	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%
127 % Transmission/End-User Reduct	Ambitious - Max	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%
128 % Production/End-User Reductio	Ambitious - Max	-0.14%	-0.14%	-0.14%	-0.14%	-0.14%	-0.14%	-0.14%	-0.14%
129 % All Infrastructure	Ambitious - Max	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%	-0.25%
130									
131 Infrastructure as Percent	of End-User Reductions								
132		Year							
133 End-User Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
134 % Storage/End-User Reductions	Conservative - Max	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%
135 % Transmission/End-User Reduct		-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%
136 % Production/End-User Reductio	Conservative - Max	-0.09%	-0.09%	-0.09%	-0.09%	-0.09%	-0.10%	-0.10%	-0.10%
137 % All Infrastructure	Conservative - Max	-0.16%	-0.16%	-0.16%	-0.16%	-0.17%	-0.17%	-0.17%	-0.17%
138									

	Z	AA	AG	АН	Al	AJ	AK	AL	AM	AN
1										
6										
7			Angeles Lin	k Throughp	ut Scenario	GHG Sumr	nary			
8										
9			AL Change i	n GHG (MT	CO2e/yr) -	Low				
10			Year							
11	Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
12	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Industry (Hard-to-Electrify)	FoodBeverage	-19,932.5	-22,833.3	-25,500.4	-27,934.6	-30,142.0	-32,166.6	-34,018.6	-35,711.7
14	Industry (Hard-to-Electrify)	Metals	-13,099.5	-14,737.2	-16,264.9	-17,687.1	-19,016.6	-20,252.7	-21,405.3	-22,476.4
15	Industry (Hard-to-Electrify)	StoneGlassCement	-35,279.2	-39,945.2	-44,235.6	-48,164.9	-51,797.5	-55,107.5	-58,109.8	-60,910.5
16	Industry (Hard-to-Electrify)	Paper	-4,212.1	-4,996.3	-5,723.2	-6,395.1	-7,014.6	-7,584.7	-8,108.6	-8,589.3
17	Industry (Hard-to-Electrify)	Chemicals	-1,871.5	-2,235.6	-2,574.7	-2,889.9	-3,182.3	-3,453.2	-3,703.9	-3,935.7
18	Industry (Hard-to-Electrify)	AeroSpaceDefense	-671.7	-795.5	-910.0	-1,015.4	-1,112.1	-1,200.8	-1,281.9	-1,356.0
19	Power	PeakerBaseload	-9,988.4	-23,170.1	-41,624.5	-65,351.6	-94,351.3	-128,623.6	-169,705.0	-216,470.4
20	Power	Cogeneration	-1,541.2	-4,947.6	-9,960.9	-16,581.1	-24,808.3	-34,642.5	-46,484.1	-60,058.1
21	Mobility	MDV	-23,445.0	-33,430.8	-46,919.7	-64,252.6	-85,827.1	-111,945.5	-137,768.0	-162,866.4
22	Mobility	HDV	-108,163.3	-144,449.8	-204,517.5	-290,086.3	-403,059.5	-545,285.0	-678,989.9	-804,191.8
23	Mobility	Bus	-104,685.7	-136,580.5	-172,551.7	-212,153.8	-255,098.5	-301,089.1	-367,330.1	-430,463.7
24	Mobility	Agriculture	-1,968.9	-2,768.9	-3,618.2	-4,511.6	-5,444.4	-6,412.6	-7,657.0	-9,201.6
25	Mobility	CHC	-518.7	-841.0	-1,147.8	-1,431.8	-1,696.1	-4,633.1	-7,498.3	-9,824.4
26	Mobility	CHE	-8,001.7	-10,855.1	-13,530.7	-16,006.3	-18,325.2	-20,505.2	-23,266.3	-26,684.3
27	Mobility	Construction & Mining	-4,276.5	-6,487.0	-10,035.7	-14,891.8	-20,962.4	-28,170.8	-33,579.2	-39,385.8
28	Mobility	GSE	-1,032.7	-1,508.5	-2,126.2	-2,910.1	-3,862.6	-4,993.1	-5,954.2	-6,950.7
29	Infrastructure	Storage	63.6	84.8	113.8	151.1	197.0	252.7	310.7	368.4
30	Infrastructure	Transmission	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1
31	Infrastructure	Production	300.7	400.6	537.8	713.8	930.8	1194.2	1467.8	1740.7
33	Overall Project	Overall	-338,161.0	-449,879.4	-600,297.9	-791,011.0	-1,024,066.8	-1,303,969.9	-1,602,283.8	-1,896,021.5

	Z	AA	AG	АН	Al	AJ	AK	AL	AM	AN
34		•	AL Change	in GHG (MT	CO2e/yr) -	Medium			-	
35			Year	-						
36	Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
37	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Industry (Hard-to-Electrify)	FoodBeverage	-47,144.0	-55,362.4	-63,077.3	-70,369.1	-77,402.6	-84,133.1	-90,467.1	-96,730.4
39	Industry (Hard-to-Electrify)	Metals	-18,558.1	-21,044.5	-23,388.5	-25,578.3	-27,924.1	-30,082.3	-32,338.6	-34,448.1
40	Industry (Hard-to-Electrify)	StoneGlassCement	-42,428.8	-49,394.0	-55,174.0	-59,555.2	-65,297.6	-69,829.1	-72,651.4	-78,649.7
41	Industry (Hard-to-Electrify)	Paper	-5,492.5	-6,641.5	-7,737.6	-8,788.8	-9,799.5	-10,773.9	-11,701.9	-12,600.9
42	Industry (Hard-to-Electrify)	Chemicals	-2,473.1	-3,048.3	-3,629.3	-4,223.8	-4,834.2	-5,445.0	-6,062.8	-6,707.6
43	Industry (Hard-to-Electrify)	AeroSpaceDefense	-984.5	-1,201.7	-1,419.7	-1,619.1	-1,819.8	-2,012.8	-2,184.0	-2,355.3
44	Power	PeakerBaseload	-26,904.4	-62,410.4	-112,118.6	-176,029.1	-254,141.9	-346,457.0	-457,112.5	-583,078.6
45	Power	Cogeneration	-4,151.4	-13,326.6	-26,830.3	-44,662.5	-66,823.0	-93,311.9	-125,208.3	-161,770.8
46	Mobility	MDV	-54,499.2	-70,704.3	-91,034.6	-115,661.6	-144,871.5	-178,840.7	-211,779.3	-243,193.3
47	Mobility	HDV	-376,168.6	-455,317.7	-562,473.4	-699,493.4	-868,592.4	-1,071,759.9	-1,262,618.5	-1,441,540.8
48	Mobility	Bus	-250,841.3	-294,107.2	-338,943.0	-385,133.6	-432,652.3	-481,416.0	-556,654.5	-628,491.6
49	Mobility	Agriculture	-3,724.7	-5,124.2	-6,647.7	-8,289.6	-10,044.8	-11,908.5	-13,972.9	-16,244.5
50	Mobility	СНС	-751.6	-1,222.3	-1,674.0	-2,095.7	-2,491.0	-6,865.2	-11,132.2	-14,596.4
51	Mobility	CHE	-10,859.6	-14,514.1	-18,497.2	-22,753.9	-27,320.6	-32,198.5	-37,235.5	-42,483.2
52	Mobility	Construction & Mining	-12,914.1	-16,772.6	-21,610.8	-27,421.7	-34,148.6	-41,739.0	-47,264.3	-53,715.2
53	Mobility	GSE	-1,952.5	-2,685.4	-3,563.8	-4,611.1	-5,820.7	-7,197.8	-8,361.0	-9,575.9
54	Infrastructure	Storage	158.9	202.5	257.9	325.4	406.3	501.5	602.5	707.2
55	Infrastructure	Transmission	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3
56	Infrastructure	Production	750.7	957.0	1,218.6	1,537.3	1,919.9	2,369.5	2,846.7	3,341.7
58	Overall Project	Overall	-858,530.8	-1,071,197.6	-1,335,681.1	-1,653,588.3	-2,030,614.9	-2,469,811.9	-2,941,748.4	-3,420,317.1

	Z	AA	AG	АН	Al	AJ	AK	AL	AM	AN
59		1	<u>-</u>	in GHG (MT	CO2e/yr) -				<u>l</u>	
60			Year							
	Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
62	Industry (Hard-to-Electrify)	Refineries	-191,372.4	-221,568.6	-247,839.2	-273,647.7	-297,926.3	-318,300.4	-328,408.5	-358,487.9
63	Industry (Hard-to-Electrify)	FoodBeverage	-38,416.2	-45,113.1	-51,399.7	-57,341.6	-63,073.0	-68,557.5	-73,718.9	-78,822.7
64	Industry (Hard-to-Electrify)	Metals	-15,122.4	-17,148.5	-19,058.5	-20,843.0	-22,754.5	-24,513.1	-26,351.7	-28,070.7
65	Industry (Hard-to-Electrify)	StoneGlassCement	-34,573.9	-40,249.6	-44,959.6	-48,529.7	-53,209.0	-56,901.6	-59,201.4	-64,089.2
66	Industry (Hard-to-Electrify)	Paper	-4,475.7	-5,412.0	-6,305.1	-7,161.7	-7,985.4	-8,779.3	-9,535.5	-10,268.1
67	Industry (Hard-to-Electrify)	Chemicals	-2,015.3	-2,483.9	-2,957.4	-3,441.8	-3,939.2	-4,437.0	-4,940.4	-5,465.8
68	Industry (Hard-to-Electrify)	AeroSpaceDefense	-802.3	-979.2	-1,156.9	-1,319.4	-1,482.9	-1,640.1	-1,779.7	-1,919.2
69	Power	PeakerBaseload	-35,644.3	-82,684.3	-148,540.2	-233,211.9	-336,699.5	-459,003.0	-605,604.7	-772,490.8
70	Power	Cogeneration	-5,499.9	-17,655.8	-35,546.1	-59,171.0	-88,530.3	-123,624.2	-165,882.0	-214,321.8
71	Mobility	MDV	-82,479.9	-103,872.5	-127,884.4	-154,077.2	-182,205.4	-211,951.5	-240,162.5	-266,548.8
72	Mobility	HDV	-624,917.8	-743,260.6	-878,339.8	-1,031,019.7	-1,202,718.1	-1,394,456.4	-1,574,126.9	-1,743,060.7
73	Mobility	Bus	-378,250.9	-429,849.0	-475,003.1	-514,176.7	-548,052.1	-577,183.9	-630,844.7	-682,279.6
74	Mobility	Agriculture	-4,631.4	-6,289.9	-8,096.4	-10,043.8	-12,126.0	-14,336.6	-16,591.5	-18,876.2
75	Mobility	CHC	-622.4	-1,052.0	-1,487.4	-1,915.3	-2,335.5	-6,846.8	-11,246.1	-14,818.4
76	Mobility	CHE	-12,674.5	-16,661.7	-21,168.1	-26,126.3	-31,570.9	-37,497.2	-43,052.6	-48,264.2
77	Mobility	Construction & Mining	-18,707.5	-23,171.2	-27,809.3	-32,646.6	-37,693.2	-42,946.2	-46,575.1	-51,441.0
78	Mobility	GSE	-2,818.9	-3,747.4	-4,733.1	-5,781.4	-6,867.6	-7,982.7	-8,909.2	-9,894.5
79	Infrastructure	Storage	507.1	595.7	693.4	801.3	920.2	1,050.2	1,185.2	1,332.2
80	Infrastructure	Transmission	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2
81	Infrastructure	Production	2,396.2	2,814.9	3,276.3	3,786.1	4,348.0	4,961.9	5,600.2	6,294.5
83	Overall Project	Overall	-1,448,819.8	-1,756,258.7	-2,096,533.9	-2,473,809.7	-2,891,537.3	-3,350,248.4	-3,837,102.1	-4,358,071.7
84										
99										
100			AL GHG Sui	mmary by E	nd-User Sed	tor (millior	n MT CO2e/	year)		
102	Segment	Sector	2030	2031	2032	2033	2034	2035	2036	2037
	Change in GHG - Low	End-User	-0.3	-0.5	-0.6	-0.8	-1.0	-1.3	-1.6	-1.9
104	Change in GHG - Med	End-User	-0.9	-1.1	-1.3	-1.7	-2.0	-2.5	-2.9	-3.4
105	Change in GHG - High	End-User	-1.5	-1.8	-2.1	-2.5	-2.9	-3.4	-3.8	-4.4
106										
107			AL GHG Sui	mmary by S	cenario (mi	llion MT CC	2e/year)			
108							-			
110										
111	Change in GHG - Low	ALL	-0.3	-0.4	-0.6	-0.8	-1.0	-1.3	-1.6	-1.9
	Change in GHG - Medium	ALL	-0.9	-1.1	-1.3	-1.7	-2.0		-2.9	-3.4
	Change in GHG - High	ALL	-1.4	-1.8	-2.1	-2.5	-2.9		-3.8	-4.4
114		•	•		· ·					

	Z	AA	AP	AQ	AR	AS	AT	AU	AV	AW					
1		•													
6															
7			Angeles Lin	k Throughp	ut Scenario	GHG Sumr	nary								
8							<u>-</u>			-					
9			AL Change	in GHG (MT	CO2e/yr) -	Low									
10				-											
11	Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045					
12	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
13	Industry (Hard-to-Electrify)	FoodBeverage	-37,222.0	-38,587.6	-40,788.6	-42,798.2	-44,632.7	-46,307.5	-47,836.6	-49,232.7					
14	Industry (Hard-to-Electrify)	Metals	-23,473.6	-24,398.8	-25,285.5	-26,111.0	-26,881.0	-27,600.1	-28,270.9	-28,849.3					
15	Industry (Hard-to-Electrify)	StoneGlassCement	-63,418.1	-65,695.4	-67,824.2	-69,781.6	-71,567.1	-73,204.0	-74,707.2	-76,079.1					
16	Industry (Hard-to-Electrify)	Paper	-9,030.3	-9,434.6	-10,075.8	-10,667.4	-11,213.2	-11,716.9	-12,181.9	-12,611.0					
17	Industry (Hard-to-Electrify)														
18	Industry (Hard-to-Electrify)	AeroSpaceDefense	-1,423.6	-1,485.2	-1,583.0	-1,673.0	-1,755.7	-1,831.8	-1,901.9	-1,966.4					
19	Power	PeakerBaseload	-268,920.1	-327,053.9	-390,871.8	-464,266.0	-543,955.4	-629,940.0	-722,219.9	-820,795.0					
20	Power	Cogeneration	-75,364.5	-92,403.2	-111,174.2	-132,790.9	-156,326.1	-181,779.9	-209,152.4	-238,443.4					
21	Mobility	MDV	-187,424.3	-211,621.1	-235,374.8	-258,749.8	-281,567.8	-304,121.6	-325,947.8	-347,360.4					
22	Mobility	HDV	-921,937.0	-1,033,189.3	-1,138,967.5	-1,259,959.0	-1,397,564.3	-1,551,501.9	-1,721,120.7	-1,905,717.3					
23	Mobility	Bus	-489,284.6	-544,089.8	-595,178.0	-642,776.7	-687,566.7	-729,967.0	-769,757.8	-807,265.8					
24	Mobility	Agriculture	-11,053.3	-13,215.8	-15,691.5	-18,170.5	-20,629.7	-23,066.5	-25,479.6	-27,868.4					
25	Mobility	СНС	-11,625.9	-13,002.4	-14,050.5	-15,050.6	-16,058.6	-17,081.1	-18,114.4	-19,153.3					
26	Mobility	CHE	-30,686.3	-35,290.8	-40,407.2	-45,551.7	-50,415.9	-55,013.7	-59,374.3	-63,525.8					
27	Mobility	Construction & Mining	-44,679.7	-49,640.3	-54,441.2	-58,941.3	-63,228.4	-67,334.6	-71,293.4	-75,141.6					
28	Mobility	GSE	-7,873.0	-8,725.0	-9,512.0	-10,089.8	-10,615.6	-11,099.2	-11,543.3	-11,951.0					
29	Infrastructure	Storage	426.1	483.9	542.7	607.9	678.6	754.8	836.3	923.0					
30	Infrastructure	Transmission	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5					
31	Infrastructure	Production	2013.1	2286.5	2564.4	2872.4	3206.3	3566.3	3951.3	4361.3					
33	Overall Project	Overall	-2,184,032.7	-2,468,168.0	-2,751,393.0	-3,057,301.2	-3,383,592.3	-3,730,804.8	-4,097,703.6	-4,484,264.2					

	Z	AA	AP	AQ	AR	AS	AT	AU	AV	AW
34		•	AL Change	in GHG (M1	CO2e/yr) -	Medium				
35				-						
36	Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
37	Industry (Hard-to-Electrify)	Refineries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Industry (Hard-to-Electrify)	FoodBeverage	-102,903.5	-108,789.1	-116,007.9	-122,968.5	-129,598.5	-135,982.3	-141,993.8	-147,675.9
39	Industry (Hard-to-Electrify)	Metals	-36,532.0	-38,528.7	-40,623.9	-42,620.8	-44,615.7	-46,634.1	-48,539.4	-50,314.1
40	Industry (Hard-to-Electrify)	StoneGlassCement	-81,278.4	-82,858.7	-84,177.4	-86,491.1	-88,242.0	-90,137.5	-92,269.0	-93,638.7
41	Industry (Hard-to-Electrify)	Paper	-13,465.4	-14,319.3	-15,510.8	-16,668.6	-17,826.3	-18,916.6	-19,964.7	-20,971.0
42	Industry (Hard-to-Electrify)	Chemicals	-7,364.5	-8,043.1	-9,005.4	-9,997.6	-11,006.7	-12,039.3	-13,085.7	-14,112.2
43	Industry (Hard-to-Electrify)	AeroSpaceDefense	-2,511.7	-2,678.6	-2,920.5	-3,155.0	-3,384.8	-3,594.2	-3,802.1	-4,013.6
44	Power	PeakerBaseload	-724,355.5	-880,943.0	-1,052,841.2	-1,250,533.7	-1,465,182.8	-1,696,788.6	-1,945,351.0	-2,210,870.1
45	Power	Cogeneration	-202,999.6	-248,894.6	-299,455.8	-357,681.8	-421,075.6	-489,637.3	-563,366.9	-642,264.3
46	Mobility	MDV	-273,359.9	-302,519.8	-330,586.0	-358,281.5	-385,409.1	-412,335.4	-438,460.5	-464,176.8
47	Mobility	HDV	-1,610,101.5	-1,769,740.2	-1,921,997.7	-2,080,816.8	-2,247,262.8	-2,421,648.9	-2,603,836.4	-2,793,546.0
48	Mobility	Bus	-695,632.7	-758,419.9	-817,161.4	-872,080.1	-923,993.7	-973,381.1	-1,019,901.6	-1,063,928.8
49	Mobility	Agriculture	-18,722.8	-21,406.5	-24,293.5	-27,183.0	-30,057.4	-32,912.4	-35,744.9	-38,552.2
50	Mobility	CHC	-17,279.6	-19,329.9	-20,891.1	-22,208.0	-23,366.9	-24,409.8	-25,363.0	-26,244.7
51	Mobility	CHE	-47,870.6	-53,469.2	-59,196.1	-64,987.5	-70,491.0	-75,724.3	-80,718.1	-85,501.9
52	Mobility	Construction & Mining	-59,761.2	-65,520.2	-71,132.3	-76,466.0	-81,631.9	-86,653.3	-91,552.3	-96,355.2
53	Mobility	GSE	-10,701.6	-11,742.5	-12,704.8	-13,403.8	-14,039.8	-14,624.5	-15,161.3	-15,653.5
54	Infrastructure	Storage	814.0	923.8	1,037.9	1,163.3	1,296.4	1,437.5	1,586.5	1,743.1
55	Infrastructure	Transmission	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
56	Infrastructure	Production	3,846.0	4,364.6	4,904.1	5,496.6	6,125.2	6,792.0	7,496.0	8,236.0
58	Overall Project	Overall	-3,898,090.1	-4,379,542.8	-4,869,898.2	-5,395,896.4	-5,946,434.2	-6,523,498.5	-7,125,954.1	-7,753,363.4

	Z	AA	AP	AQ	AR	AS	AT	AU	AV	AW
59			AL Change	in GHG (MT	CO2e/yr) -	High				
60			1	· · · · · · · · · · · · · · · · · · ·	.,,					
61	Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
62	Industry (Hard-to-Electrify)	Refineries	-373,046.1	-387,065.5	-403,336.0	-413,927.1	-426,329.5	-441,405.8	-453,028.8	-464,496.4
63	Industry (Hard-to-Electrify)	FoodBeverage	-83,852.9	-88,648.9	-94,531.3	-100,203.3	-105,605.9	-110,807.8	-115,706.4	-120,336.6
64	Industry (Hard-to-Electrify)	Metals	-29,768.8	-31,395.9	-33,103.2	-34,730.4	-36,356.0	-38,000.7	-39,553.3	-40,999.4
65	Industry (Hard-to-Electrify)	StoneGlassCement	-66,231.3	-67,519.0	-68,593.6	-70,479.0	-71,905.7	-73,450.3	-75,187.2	-76,303.3
66	Industry (Hard-to-Electrify)	Paper	-10,972.6	-11,668.4	-12,639.3	-13,582.7	-14,526.1	-15,414.6	-16,268.6	-17,088.6
67	Industry (Hard-to-Electrify)	Chemicals	-6,001.1	-6,554.1	-7,338.2	-8,146.7	-8,969.1	-9,810.4	-10,663.1	-11,499.6
68	Industry (Hard-to-Electrify)	AeroSpaceDefense	-2,046.7	-2,182.7	-2,379.8	-2,570.9	-2,758.2	-2,928.8	-3,098.2	-3,270.6
69	Power	PeakerBaseload	-959,661.2	-1,167,116.0	-1,394,855.1	-1,656,767.7	-1,941,145.2	-2,247,987.8	-2,577,295.3	-2,929,067.9
70	Power	Cogeneration	-268,943.7	-329,747.6	-396,733.5	-473,874.1	-557,861.4	-648,695.3	-746,375.8	-850,902.9
71	Mobility	MDV	-291,400.9	-314,939.5	-337,097.6	-359,093.5	-380,772.0	-402,452.0	-423,583.3	-444,507.1
72	Mobility	HDV	-1,902,847.9	-2,054,877.6	-2,200,660.1	-2,341,466.5	-2,477,535.6	-2,609,689.7	-2,738,369.1	-2,863,827.9
73	Mobility	Bus	-730,704.7	-776,373.2	-819,452.5	-860,042.4	-898,800.3	-936,072.8	-971,464.0	-1,005,244.7
74	Mobility	Agriculture	-21,182.4	-23,503.0	-25,831.5	-28,162.0	-30,489.4	-32,808.7	-35,115.7	-37,406.4
75	Mobility	CHC	-17,586.4	-19,702.7	-21,315.1	-22,542.6	-23,475.9	-24,183.6	-24,717.1	-25,115.2
76	Mobility	CHE	-53,086.8	-57,625.4	-61,831.8	-66,143.1	-70,276.8	-74,247.6	-78,075.6	-81,779.9
77	Mobility	Construction & Mining	-56,189.2	-60,817.9	-65,373.1	-69,777.4	-74,127.0	-78,426.8	-82,677.3	-86,883.4
78	Mobility	GSE	-10,810.1	-11,659.0	-12,445.1	-13,001.9	-13,508.4	-13,973.8	-14,400.4	-14,791.0
79	Infrastructure	Storage	1,479.2	1,631.5	1,791.1	1,954.4	2,125.8	2,306.0	2,493.2	2,688.1
80	Infrastructure	Transmission	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
81	Infrastructure	Production	6,988.9	7,708.5	8,462.8	9,234.4	10,044.2	10,895.7	11,779.9	12,701.0
83	Overall Project	Overall	-4,872,066.1	-5,397,866.5	-5,942,663.3	-6,518,303.4	-7,116,813.1	-7,741,232.7	-8,384,903.6	-9,051,228.3
84										
99										
100			AL GHG Sui	mmary by E	nd-User Se	ctor (millior	MT CO2e/	year)		
102	Segment	Sector	2038	2039	2040	2041	2042	2043	2044	2045
	Change in GHG - Low	End-User	-2.2	-2.5	-2.8	-3.1	-3.4	-3.7	-4.1	-4.5
	Change in GHG - Med	End-User	-3.9	-4.4	-4.9	-5.4	-6.0	-6.5	-7.1	-7.8
105	Change in GHG - High	End-User	-4.9	-5.4	-6.0	-6.5	-7.1	-7.8	-8.4	-9.1
106										
107			AL GHG Sui	mmary by S	cenario (mi	llion MT CC	2e/vear)			
108			712 011 0 011							
110										
	Change in GHG - Low	ALL	-2.2	-2.5	-2.8	-3.1	-3.4	-3.7	-4.1	-4.5
	Change in GHG - Medium	ALL	-3.9	-4.4	-4.9	-5.4	-5.9	-6.5	- 7.1	- 4 .3
	Change in GHG - High	ALL	-4.9	-5.4	-5.9	-6.5	-7.1	-0.3 -7.7	-8.4	
114		· · · · · ·	1 7.5	5.4	5.5	0.5	,.1	7.7	0.4	5.1
1117										

	Α	A B C	D	J	K	L	М	N	0	Р	Q	R	S	T	U	V	W	Х	Υ	Z
-																				

Tab Contents

Max -

Summary of production GHG emissions results and minor calculations to develop results. The Demand Scenario results include emissions from hydrogen produced, stored, and transmitted by third-parties, in addition that hydrogen associated with Angeles Link. The Angeles Link results are specific to the hydrogen produced, stored, and transmitted within the Angeles Link system.

Market Scenario - Production - GHG

Note: raw data was copied from "ALP1_GHG_Prod_1_Calcs_SoCalGas.xlsx", tab "1. Prod_N2O_Summary".

GWP N2O	273	AR6

100% SMR

Total N2O Emis	sions (MT CO2e/year) - Co	nservative Den	nand														
		Year															
Ratio	% SMR	2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045															
Min -	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max -	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min -	33% SMR	238.82489	318.2168	427.16724	567.00383	739.36341	948.54746	1165.8933	1382.6721	1599.028171	1816.194613	2036.929956	2281.584641	2546.788856	2832.701004	3138.554518	3464.189099
Max -	33% SMR	372.93454	496.90815	667.03859	885.39897	1154.5453	1481.1945	1820.5887	2159.0974	2496.945918	2836.059931	3180.746925	3562.784921	3976.911823	4423.374983	4900.977378	5409.468692
Min -	100% SMR	717.19187	955.60599	1282.7845	1702.7142	2220.3106	2848.4909	3501.1811	4152.1686	4801.886399	5454.037876	6116.906775	6851.605529	7648.014583	8506.609623	9425.088644	10402.97027

Total N2O Emi	ssions (MT CO2e/year) - N	loderate Demar	nd														
		Year															
Ratio	% SMR	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Min -	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max -	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min -	33% SMR	514.39983	655.6942	834.97466	1053.3293	1315.4774	1623.5662	1950.4835	2289.6452	2635.199544	2990.570537	3360.226392	3766.152566	4196.8998	4653.740103	5136.100965	5643.198341
Max -	33% SMR	803.25573	1023.8925	1303.8461	1644.8155	2054.1702	2535.2631	3045.7574	3575.3717	4114.968619	4669.89452	5247.126801	5880.996623	6553.625516	7266.999772	8020.225391	8812.078058
Min -	100% SMR	1544.7442	1969.0516	2507.4314	3163.151	3950.3827	4875.5742	5857.308	6875.8113	7913.512144	8980.692303	10090.76995	11309.76746	12603.3027	13975.19551	15423.72662	16946.54156
Max -	100% SMR	2412.1794	3074.7522	3915.4536	4939.3858	6168.6792	7613.4026	9146.4187	10736.852	12357.26312	14023.70727	15757.13754	17660.65052	19680.5571	21822.82214	24084.76093	26462.69687

Total N2O Emission	s (MT CO2e/year) - Ami	bitious Deman	nd														
		Year															
Ratio	% SMR	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Min -																0	
Max -	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min -	33% SMR	2014.8646	2366.8683	2754.9125	3183.5531	3656.0404	4172.194	4708.9059	5292.7144	5876.641022	6481.734105	7115.919488	7764.723961	8445.710992	9161.640048	9905.108695	10679.60478
Max -	33% SMR	3146.2909	3695.9587	4301.9052	4971.2444	5709.0521	6515.0464	7353.1434	8264.7834	9176.608065	10121.48492	11111.79055	12124.92447	13188.31273	14306.26435	15467.22013	16676.62649
Min -	100% SMR	6050.6444	7107.7125	8273.0106	9560.2195	10979.1	12529.111	14140.859	15894.037	17647.57064	19464.66698	21369.12759	23317.48937	25362.49547	27512.43258	29745.07115	32070.88521
Max -	100% SMR	9448.3212	11098.975	12918.634	14928.662	17144.301	19564.704	22081.512	24819.169	27557.38158	30394.8496	33368.74039	36411.18459	39604.54273	42961.7548	46448.10851	50079.95942

	AA	AB	AH	Al	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX
1																			
2																			
ا ا																			
<u>3</u>																			
	<u> </u>	1 = 1	• •		0110														1
6	Angeles Lin	ık Throughput Sce	nario - Pro	oduction -	- GHG														
7																			
8				,															
9	GWP N2O	273	AR6																
10																			-
	AL Total N2O Emissi	ions (MT CO2e/year) - Low Thro	ughput]
12			Year																1
13		% SMR	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	1
14		0% SMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15		0% SMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16		33% SMR	64.11839401	85.43309564	114.68351	152.22607	198.50022	254.66081	313.01263	371.21221	429.2982908	487.6019429	546.8637541	612.5472986		760.5079895	842.6218591	930.0464407	1
	Max -	33% SMR	100.1234156	133.4071677	179.08285	237.70705	309.96597	397.66295	488.78164	579.6626	670.36631	761.4097756	853.9494445	956.5169048		1187.563393	1315.787457	1452.304409	1
18		100% SMR	192.5477298	256.5558428	344.39493	457.13535	596.09677	764.74716	939.97786	1114.7514	1289.184056	1464.270099	1642.233496	1839.481377	2053.296901	2283.807776	2530.395973	2792.932254	1
	Max -	100% SMR	300.6709178	400.6221253	537.78635	713.83498	930.82875	1194.183	1467.8127	1740.7285	2013.112042	2286.515843	2564.412746	2872.423137	3206.304559	3566.256434	3951.313686	4361.274503]
20																			1
	AL Total N2O Emissi	ions (MT CO2e/year) - Medium	Throughput																1
22			Year	1								I	1		1		T	1	1
23		% SMR	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	-
24		0% SMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	Max -	0% SMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Min -	33% SMR	160.0977714	204.0731239	259.87097	327.82995	409.41889	505.30603	607.05322	712.61122		930.7617406	1045.810532	1172.147814	1306.210208	1448.393604	1598.519819	1756.344833	1
	Max -	33% SMR	249.9990207	318.668278	405.79883	511.91948	639.32383		947.93768	1112.7707	1280.710589	1453.421379	1633.07463	1830.355307		2261.724067	2496.152106	2742.602126	1
28		100% SMR	480.7740883	612.832204	780.39331	984.47434	1229.4861	1517.4355	1822.9826	2139.9736		2795.080302	3140.572169		3922.553177		4800.359818	5274.308808	1
	Max -	100% SMR	750.7478098	956.9617959	1218.6151	1537.2957	1919.8914	2369.5358	2846.6597	3341.6537	3845.977745	4364.628764	4904.128019	5496.562484	6125.222382	6791.964164	7495.952271	8236.04242]
30 31																			
	Al Total N20 Emissi	ions (MT CO2e/year) - High Thro	nughnut																1
33			Year																1
34	Ratio	% SMR	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	1
35		0% SMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
36	Max -	0% SMR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Min -	33% SMR	510.9969252	600.269825	698.6831	807.39215	927.22132	1058.1249	1194.2423	1342.304	1490.395702	1643.855497	1804.693494	1969.23909		2323.515916	2512.069627	2708.492316]
	Max -	33% SMR	797.9419684	937.3451427	1091.0214	1260.7749	1447.8929	1652.304	1864.8567	2096.0609		2566.945566	2818.100478		3344.734608	3628.26227	3922.69637	4229.41819]
39		100% SMR	1534.525301	1802.612087	2098.1475		2784.4484		3586.3131	4030.9429		4936.502994	5419.499982	5913.6309		6977.525273	7543.752635	8133.61056	
40	Max -	100% SMR	2396.222127	2814.850278	3276.3405	3786.1107	4348.0267	4961.8737	5600.1702	6294.4773	6988.924948	7708.545242	8462.764197	9234.369226	10044.24807	10895.68249	11779.86898	12700.95553	<u> </u>

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Short

Summary of infrastructure GHG emissions results and minor calculations to develop results. The Demand Scenario results include emissions from hydrogen produced, stored, and transmitted by third-parties, in addition that hydrogen associated with Angeles Link. The Angeles Link results are specific to the hydrogen produced, stored, and transmitted within the Angeles Link system.

This tab includes the acronym PRJ. This refers to the project (PRJ) scenarios used in the calculation process (particularly for stationary sources). The PRJ scenario encompasses emissions for a sector or subsector including hydrogen adoption. Since infrastructure would only be present in the PRJ scenario, and therefore emissions would only occur in the PRJ scenario. The key findings reported in this study were change in emissions (due to hydrogen adoption either at a market level or as supplied by Angeles Link). While PRJ scenario information was used to develop certain results, this information is secondary to the core results of this study.

Market Scenario - Storage - GHG

Turbine

Note: raw data was copied from "ALP1_GHG_S&T_2_CalcTool_SoCalGas.xlsx", tab "4.2.2 GHG_Results_Storage".

Storage PRJ GHG Emissions (MT CO2e/yr) - Conservative Conservative 2044 Transmission Power Scenario Storage Scenario 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2045 271.8 Long Reciprocating 200 bar 204.0 364.9 484.3 631.6 810.3 995.9 1,181.1 1,365.9 1,551.4 1,740.0 1,949.0 2,175.5 2,419.7 2,681.0 2,959.2 20 bar 58.3 77.7 104.3 138.4 180.5 231.5 284.5 337.5 390.3 443.3 497.1 556.8 621.6 691.4 766.0 845.5 Long Reciprocating Turbine 200 bar 237.0 315.8 424.0 562.7 733.8 941.4 1,157.1 1,372.3 1,587.0 1,802.5 2,021.6 2,264.4 2,527.6 2,811.4 3,114.9 3,438.1 Long 20 bar 67.7 90.2 121.1 160.8 209.7 269.0 330.6 392.1 453.4 515.0 647.0 Turbine 577.6 722.2 803.2 890.0 982.3 Long 200 bar 204.0 271.8 364.9 484.3 631.6 810.3 995.9 1,181.1 1,365.9 1,551.4 1,740.0 1,949.0 2,175.5 2,419.7 2,959.2 Short 2,681.0 Reciprocating 77.7 Reciprocating 58.3 104.3 138.4 180.5 231.5 284.5 337.5 390.3 443.3 497.1 556.8 691.4 845.5 Short 20 bar 621.6 766.0 237.0 315.8 562.7 733.8 941.4 1,157.1 1,372.3 1,587.0 1,802.5 2,021.6 2,264.4 2,527.6 3,438.1 Turbine 200 bar 424.0 2,811.4 3,114.9 Short 20 bar 67.7 90.2 121.1 160.8 209.7 269.0 330.6 392.1 453.4 515.0 577.6 647.0 722.2 803.2

Storage PR	J GHG Emissio	ons (MT CO2e/	yr) - Mod	lerate														
	Moderate		Year															
Transmission	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Long	Reciprocating	200 bar	439.4	560.1	713.2	899.8	1,123.7	1,386.9	1,666.1	1,955.8	2,251.0	2,554.6	2,870.4	3,217.1	3,585.1	3,975.3	4,387.3	4,820.5
Long	Reciprocating	20 bar	125.5	160.0	203.8	257.1	321.1	396.2	476.0	558.8	643.2	729.9	820.1	919.2	1,024.3	1,135.8	1,253.5	1,377.3
Long	Turbine	200 bar	510.5	650.8	828.7	1,045.4	1,305.6	1,611.3	1,935.8	2,272.4	2,615.4	2,968.0	3,334.9	3,737.8	4,165.3	4,618.7	5,097.4	5,600.7
Long	Turbine	20 bar	145.9	185.9	236.8	298.7	373.0	460.4	553.1	649.3	747.2	848.0	952.8	1,067.9	1,190.1	1,319.6	1,456.4	1,600.2
Short	Reciprocating	200 bar	439.4	560.1	713.2	899.8	1,123.7	1,386.9	1,666.1	1,955.8	2,251.0	2,554.6	2,870.4	3,217.1	3,585.1	3,975.3	4,387.3	4,820.5
Short	Reciprocating	20 bar	125.5	160.0	203.8	257.1	321.1	396.2	476.0	558.8	643.2	729.9	820.1	919.2	1,024.3	1,135.8	1,253.5	1,377.3
Short	Turbine	200 bar	510.5	650.8	828.7	1,045.4	1,305.6	1,611.3	1,935.8	2,272.4	2,615.4	2,968.0	3,334.9	3,737.8	4,165.3	4,618.7	5,097.4	5,600.7
Short	Turbine	20 bar	145.9	185.9	236.8	298.7	373.0	460.4	553.1	649.3	747.2	848.0	952.8	1,067.9	1,190.1	1,319.6	1,456.4	1,600.2

890.0

982.3

4.4 Infrastruc_GHG

А	В	С	D	J	К	L	М	N	0	Р	Q	R	S	Т	U	V	W	Х	Υ
35	•			•	•	•	•	•	•	•	•		•	•	•	•	•		•
36	Storage PR	J GHG Emissic	ons (MT CO2e/	yr) - Amb	itious														
7		Ambitious		Year															
8	Transmission	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
9	Long	Reciprocating	200 bar	1,721.1	2,021.8	2,353.3	2,719.4	3,123.0	3,563.9	4,022.4	4,521.1	5,019.9	5,536.8	6,078.5	6,632.7	7,214.5	7,826.0	8,461.1	9,122.7
)	Long	Reciprocating	20 bar	491.8	577.7	672.4	777.0	892.3	1,018.3	1,149.3	1,291.7	1,434.3	1,581.9	1,736.7	1,895.1	2,061.3	2,236.0	2,417.5	2,606.5
L	Long	Turbine	200 bar	1,999.7	2,349.0	2,734.2	3,159.6	3,628.5	4,140.8	4,673.4	5,252.9	5,832.4	6,432.9	7,062.3	7,706.2	8,382.1	9,092.6	9,830.5	10,599.2
2	Long	Turbine	20 bar	571.3	671.2	781.2	902.7	1,036.7	1,183.1	1,335.3	1,500.8	1,666.4	1,838.0	2,017.8	2,201.8	2,394.9	2,597.9	2,808.7	3,028.3
3	Short	Reciprocating	200 bar	1,721.1	2,021.8	2,353.3	2,719.4	3,123.0	3,563.9	4,022.4	4,521.1	5,019.9	5,536.8	6,078.5	6,632.7	7,214.5	7,826.0	8,461.1	9,122.7
4	Short	Reciprocating	20 bar	491.8	577.7	672.4	777.0	892.3	1,018.3	1,149.3	1,291.7	1,434.3	1,581.9	1,736.7	1,895.1	2,061.3	2,236.0	2,417.5	2,606.5
5	Short	Turbine	200 bar	1,999.7	2,349.0	2,734.2	3,159.6	3,628.5	4,140.8	4,673.4	5,252.9	5,832.4	6,432.9	7,062.3	7,706.2	8,382.1	9,092.6	9,830.5	10,599.2
6	Short	Turbine	20 bar	571.3	671.2	781.2	902.7	1,036.7	1,183.1	1,335.3	1,500.8	1,666.4	1,838.0	2,017.8	2,201.8	2,394.9	2,597.9	2,808.7	3,028.3
7																			

	AA	AB	AC	AI I	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	
1	701	715	710	1 / " 1	7.5	7.11	, KL	7 (141	7.114	7.0	7.11	710	7.11	7.5		7.0	, , ,	7,000	700	ш
6																				
7	Market Scena	rio - Transmissior	n - GHG																	
-				· 2 CalcTacl	SoCalCad	vlev" tob	"4 2 1 646	Posulto T	ransmiss"											i
	Note: raw date	a was copied iroi	n "ALP1_GHG_S&T	_z_calc100i	_30CalGas	.XISX , LAD	4.2.1 010	_kesuits_i	14115111155 .											
9	Tuonomiasi	- DDI CUC F	missisms (NAT C	2020 (1.11)	Concom														1	1
			missions (MT C		Conserv	ative														
11		Conservative	Chanasa Caanania	Year	2024	2022	2022	2024	2025	2026	2027	2020	2020	20.40	2044	2042	2042	2044	2045	1
			Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	1
			200 bar 20 bar	608.7 608.7	811.1 811.1	1,088.8 1,088.8	1,445.2 1,445.2	1,884.5 1,884.5	2,417.6	2,971.6 2,971.6	3,524.1 3,524.1	4,075.6 4,075.6	4,629.1 4,629.1	5,191.7 5,191.7	5,815.2 5,815.2	6,491.2 6,491.2	7,219.9 7,219.9	7,999.5 7,999.5	8,829.4	1
		<u> </u>	200 bar	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6 2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4 8,829.4	1
			20 bar	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4	1
			200 bar	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4	1
_			20 bar	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4	
_	Short		200 bar	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4	
	Short		20 bar	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4	
-			1	1 300		_,,,,,,,	-,	_,	_,, .	_,	-,	.,5.5.6	.,	-,	-,	-,	. ,==0.5	. ,555.5	-,	i
21 22																				
_	Transmissi	DDI CUC F	missions (NAT C	2020/201	Madara															1
-			missions (MT C		wodera	te														1
24		Moderate Power Scenario	Storago Sconario	Year 2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	1
			Storage Scenario 200 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7	2045 14,383.2	1
_			20 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7	14,383.2	1
			200 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7		1
	Long		20 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7	14,383.2	1
-	_		200 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7	14,383.2	
			20 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9		13,090.7		
_	_	·	200 bar	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8			5,835.8		7,622.3	8,564.4				13,090.7		4
			20 bar	1,311.1	1,671.2	2,128.2		3,352.8		4,971.3	5,835.8		7,622.3	8,564.4	9,599.1		11,861.3			1
34	311011	Tarbine	20 541	1,311.1	1,071.2	2,120.2	2,004.7	3,332.0	7,130.1	4,571.5	3,033.0	0,710.5	7,022.5	0,504.4	3,333.1	10,030.5	11,001.5	13,030.7	14,303.2	1
35																				
	Transmissi	on PRI GHG F	missions (MT C	02e/vrl -	Amhitio	us														
37		Ambitious		Year																1
_			Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
			200 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0		13,489.9				19,790.5	21,526.2		25,245.8		4
-	_		20 bar	5,135.4	6,032.6	7,021.6	8,114.1		10,634.0			14,978.2				21,526.2		25,245.8		4
$\overline{}$		<u> </u>	200 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0		13,489.9		16,520.4		19,790.5	21,526.2	23,350.9	25,245.8		1
-	_	Turbine	20 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0	12,001.9	13,489.9	14,978.2	16,520.4	18,136.8	19,790.5	21,526.2	23,350.9	25,245.8	27,219.9	
43	Short	Reciprocating	200 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0	12,001.9	13,489.9	14,978.2	16,520.4	18,136.8	19,790.5	21,526.2	23,350.9	25,245.8	27,219.9]
44	Short	Reciprocating	20 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0	12,001.9	13,489.9	14,978.2	16,520.4	18,136.8	19,790.5	21,526.2	23,350.9	25,245.8	27,219.9	
45	Short	Turbine	200 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0	12,001.9	13,489.9	14,978.2	16,520.4	18,136.8	19,790.5	21,526.2	23,350.9	25,245.8	27,219.9	
46	Short	Turbine	20 bar	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0			14,978.2			19,790.5	21,526.2				4
47				· · · · · · · · · · · · · · · · · · ·	-	- I		· ·	·	· ·		•	·	-			-	·	-	1

	AZ	BA	ВВ	ВН	ВІ	ВЈ	ВК	BL	ВМ	BN	ВО	ВР	BQ	BR	BS	ВТ	BU	BV	BW
1	712	<i>D</i> , (511			БIX	<u> </u>	DIVI	DIV	50	D1	DQ	DIN	55	<i>D</i> 1	50		5**
6																			
7	Angeles Lir	k Throughpu	ut Scenario - St	orage - G	iHG														
	80.00 =																		
9																			
	Al Ctoroso	DDI CUC Free	issions (NAT CO	20 /															
_			issions (MT CO		LOW														
11		Low		Year	2024	2022	2022	2024	2025	2026	2027	2020	2020	2040	2044	20.42	20.42	2044	2045
-			Storage Scenario	2030		2032	2033	2034	2035	2036	2037		2039	2040	2041	2042	2043	2044	2045
13 L		Reciprocating	200 bar 20 bar	54.8 15.6	73.0 20.9	98.0 28.0	130.0 37.2	169.6 48.4	217.5 62.2	267.4 76.4	317.1 90.6	366.7 104.8	416.5 119.0	467.1 133.5	523.2 149.5	584.1 166.9	649.6	719.8 205.7	794.5 227.0
14 L		Reciprocating Turbine	200 bar	63.6	84.8	113.8	151.1	197.0	252.7	310.7	368.4	426.1	483.9	542.7	607.9	678.6	185.6 754.8	836.3	923.0
16 L		Turbine	20 bar	18.2	24.2	32.5	43.2	56.3	72.2	88.8	105.3	121.7	138.3	155.1	173.7	193.9	215.7	238.9	263.7
17 5		Reciprocating	200 bar	54.8	73.0	98.0	130.0	169.6	217.5	267.4	317.1	366.7	416.5	467.1	523.2	584.1	649.6	719.8	794.5
18 9		Reciprocating	20 bar	15.6	+	28.0	37.2	48.4	62.2	76.4	90.6	104.8	119.0	133.5	149.5	166.9	185.6	205.7	227.0
19 9		Turbine	200 bar	63.6	84.8	113.8	151.1	197.0	252.7	310.7	368.4	426.1	483.9	542.7	607.9	678.6	754.8	836.3	923.0
20 5		Turbine	20 bar	18.2	24.2	32.5	43.2	56.3	72.2	88.8	105.3		138.3	155.1	173.7	193.9	215.7	238.9	263.7
			120 000		[9=.01	.5		,	33.3									
21																			
22	A. C.	DDI CUC F	inciana (NAT CO	2 - /	N														
			issions (MT CO		ivieaium														
24		Medium		Year	2024	2022	2022	2024	2025	2026	2027	2020	2020	2040	2044	2042	20.42	2044	2045
			Storage Scenario	2030		2032	2033	2034	2035	2036	2037		2039	2040	2041	2042	2043	2044	2045
26 L 27 L		Reciprocating Reciprocating	200 bar 20 bar	136.8 39.1	174.3 49.8	222.0 63.4	280.0 80.0	349.7 99.9	431.6 123.3	518.6 148.2	608.7 173.9	700.6 200.2	795.1 227.2	893.3 255.2	1,001.3 286.1	1,115.8 318.8	1,237.2 353.5	1,365.5 390.1	1,500.3 428.7
27 L		Turbine	200 bar	158.9	202.5	257.9	325.4	406.3	501.5	602.5	707.2	814.0	923.8	1,037.9	1,163.3	1,296.4	1,437.5	1,586.5	1,743.1
29 L		Turbine	20 bar	45.4	57.9	73.7	93.0	116.1	143.3	172.1	202.1	232.6	263.9	296.6	332.4	370.4	410.7	453.3	498.0
30 5		Reciprocating	200 bar	136.8	174.3	222.0	280.0	349.7	431.6	518.6	608.7	700.6	795.1	893.3	1,001.3	1,115.8	1,237.2	1,365.5	1,500.3
31 9		Reciprocating	20 bar	39.1	49.8	63.4	80.0	99.9	123.3	148.2	173.9	200.2	227.2	255.2	286.1	318.8	353.5	390.1	428.7
32 9		Turbine	200 bar	158.9	202.5	257.9	325.4	406.3	501.5	602.5	707.2		923.8	1,037.9		1,296.4	1,437.5		1,743.1
															1				
33 5	Snort	Turbine	20 bar	45.4	57.9	73.7	93.0	116.1	143.3	172.1	202.1	232.6	263.9	296.6	332.4	370.4	410.7	453.3	498.0
34																			
35	A. C.	DDI CHC F	inciana (NAT CO	2 - /															
			issions (MT CO		nıgn														
37		High		Year	2024	2022	2022	2024	2025	2026	2027	2020	2020	2040	2044	2042	20.42	2044	2045
			Storage Scenario	2030		2032	2033	2034 792.0	2035 903.9	2036	2037		2039	2040	2041	2042	2043	2044	2045
39 L 40 L			200 bar 20 bar	436.5 124.7	512.8 146.5	596.8 170.5	689.7	226.3	258.2	1,020.1 291.5	1,146.6 327.6		1,404.2 401.2	1,541.6 440.5	1,682.2 480.6	1,829.7 522.8	1,984.8 567.1	2,145.8 613.1	2,313.6 661.0
40 L		Reciprocating Turbine	200 bar	507.1	595.7	693.4	197.1 801.3	920.2	1,050.2	1,185.2	1,332.2	1,479.2	1,631.5	1,791.1	1,954.4	2,125.8	2,306.0	2,493.2	2,688.1
41 L	_	Turbine	200 bar	144.9	170.2	198.1	228.9	262.9	300.0	338.6	380.6		466.1	511.7	558.4	607.4	658.9	712.3	768.0
43 5		Reciprocating	200 bar	436.5	512.8	596.8	689.7	792.0	903.9	1,020.1	1,146.6		1,404.2	1,541.6	1,682.2	1,829.7	1,984.8	2,145.8	2,313.6
44 9		Reciprocating	20 bar	124.7	146.5	170.5	197.1	226.3	258.2	291.5	327.6		401.2	440.5	480.6	522.8	567.1	613.1	661.0
45 9		Turbine	200 bar	507.1	595.7	693.4	801.3	920.2	1,050.2	1,185.2	1,332.2		1,631.5	1,791.1	1,954.4	2,125.8	2,306.0	2,493.2	2,688.1
46 9		Turbine	20 bar	144.9	170.2	198.1		262.9	300.0		380.6		466.1	511.7		607.4		712.3	768.0
46 5	DITUIT	rurbiile	LTO NOI	144.9	1/0.2	198.1	228.9	202.9	300.0	338.6	380.6	422.0	400.1	511./	558.4	607.4	658.9	/12.3	708.0
4/																			

1 6	ВҮ	BZ	CA	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP I				CT I		
							•	•	L		- '		<u> </u>	CQ	CR	CS	<u> </u>	CU	CV
7 I L	Δησρίος Lir	k Throughnu	t Scenario - Tra	nemiesioi	n - GHG														
_	Aligeres Eli	ik ililougiipu	t Section 11 d																
8																			
9																			
10	AL Transmi	ission PRJ GHO	G Emissions (M	IT CO2e/y	r) - Low														
11		Low		Year															
			Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
13 L		Reciprocating	200 bar	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5
14 L		Reciprocating	20 bar	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5
15 L		Turbine	200 bar	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5
16 L		Turbine	20 bar	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5
17 S 18 S		Reciprocating Reciprocating	200 bar 20 bar	163.4 163.4	217.7 217.7	292.3 292.3	388.0 388.0	505.9 505.9	649.1 649.1	797.8 797.8	946.1 946.1	1,094.2 1,094.2	1,242.8 1,242.8	1,393.8 1,393.8	1,561.2 1,561.2	1,742.7 1,742.7	1,938.4 1,938.4	2,147.6 2,147.6	2,370.5 2,370.5
18 S		Turbine	200 bar	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5
															<u> </u>		<u> </u>		
20 S	DIIUIL	Turbine	20 bar	163.4	217.7	292.3	388.0	505.9	649.1	797.8	946.1	1,094.2	1,242.8	1,393.8	1,561.2	1,742.7	1,938.4	2,147.6	2,370.5
21																			
22					_														
23	AL Transmi	ission PRJ GHO	G Emissions (M	IT CO2e/y	r) - Medi	um													
24		Medium		Year															
		Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
26 L		Reciprocating	200 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
27 L		Reciprocating	20 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
28 L		Turbine	200 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
29 L		Turbine	20 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
30 S		Reciprocating	200 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
31 S		Reciprocating	20 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
32 S	Short	Turbine	200 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
33 S	Short	Turbine	20 bar	408.1	520.1	662.4	835.6	1,043.5	1,287.9	1,547.2	1,816.3	2,090.4	2,372.3	2,665.5	2,987.5	3,329.2	3,691.6	4,074.3	4,476.5
34																			
35																			
36 /	AL Transmi	ission PRJ GHO	G Emissions (M	IT CO2e/y	r) - High														
37		High		Year															
		Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
39 L		Reciprocating	200 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
40 L		<u> </u>	20 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
41 L		Turbine	200 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
42 L		Turbine	20 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
43 S		Reciprocating	200 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
44 S		Reciprocating	20 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
45 S		Turbine	200 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
46 S	Short	Turbine	20 bar	1,302.4	1,529.9	1,780.8	2,057.9	2,363.3	2,696.9	3,043.8	3,421.2	3,798.7	4,189.8	4,599.7	5,019.1	5,459.3	5,922.1	6,402.7	6,903.3
47																			

	CX	СҮ	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DQ
1				L					l_									l	
6																			
7																			
8																			
9																			
10					Max	imum Pl	RJ Infrast	ructure (GHG Emis	sions (N	IT CO2e/	yr) - Con	servativ	e					
11			2030	2031	2032	2033	2034	2035	2036	2037	2038		2040	2041	2042	2043	2044	2045	
12		Storage	237.0	315.8	424.0	562.7	733.8	941.4	1,157.1	1,372.3	1,587.0	1,802.5	2,021.6	2,264.4	2,527.6	2,811.4	3,114.9	3,438.1	
13	High	Transmission	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2	6,491.2	7,219.9	7,999.5	8,829.4	
14		Production	1,119.92	1,492.22	2,003.12	2,658.86	3,467.10		5,467.23	6,483.78	7,498.34	8,516.70					14,717.65	16,244.65	
15		Storage	58.3	77.7	104.3	138.4	180.5	231.5	284.5	337.5	390.3	443.3	497.1	556.8		691.4		845.5	
-	Low	Transmission	608.7	811.1	1,088.8	1,445.2	1,884.5	2,417.6	2,971.6	3,524.1	4,075.6	4,629.1	5,191.7	5,815.2		7,219.9	-	8,829.4	
17		Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
18 19																			
20					Ma	vimum	DRI Infra	structure	GHG Em	issions (MT CO2	9/vr) - M	oderate						
			2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
21		Storage	510.5	650.8	828.7	1,045.4	1,305.6		1,935.8	2,272.4	2,615.4	2,968.0	3,334.9	3,737.8		4,618.7	<u> </u>	5,600.7	
	High							4,138.1											
	ılığıı	Transmission	1,311.1	1,671.2 3,074.75	2,128.2 3,915.45	2,684.7 4,939.39	3,352.8		4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9	11,861.3	13,090.7 24,084.76	14,383.2	
24 25		Production Storage	2,412.18 125.5	160.0	203.8	257.1	6,168.68 321.1	7,613.40 396.2	476.0	558.8	643.2	729.9	820.1	919.2	1,024.3	1,135.8	 	26,462.70 1,377.3	
	Low	Transmission	1,311.1	1,671.2	2,128.2	2,684.7	3,352.8	4,138.1	4,971.3	5,835.8	6,716.5	7,622.3	8,564.4	9,599.1	10,696.9			14,383.2	
27		Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	· ·	0.00	
28					······································				ļ.										
29																			
30					Ma	ximum l	PRJ Infra	structure	GHG Em	issions (MT CO2	e/yr) - An	nbitious						
31			2030	2031	2032	2033			2036	2037	2038		2040	2041	2042	2043		2045	
32		Storage	1,999.7	2,349.0	2,734.2	3,159.6	3,628.5	4,140.8	4,673.4	5,252.9	5,832.4	6,432.9	7,062.3	7,706.2	8,382.1	9,092.6	9,830.5	10,599.2	
33	High	Transmission	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	10,634.0	12,001.9	13,489.9	14,978.2	16,520.4	18,136.8	19,790.5	21,526.2	23,350.9	25,245.8	27,219.9	
34		Production	+						22,081.51								<u> </u>	50,079.96	
35		Storage	491.8	577.7	672.4	777.0	892.3	1,018.3	1,149.3	1,291.7	1,434.3		1,736.7	1,895.1	2,061.3	2,236.0	2,417.5	2,606.5	
	Low	Transmission	5,135.4	6,032.6	7,021.6	8,114.1	9,318.4	·				16,520.4					<u> </u>	27,219.9	
37		Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
38																	0/ 61	0.7407005	
39																	_	0.7197396	
40 41																	% i ransmi:	0.2802604	
41																			
43																			
44																			
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47																			

	А В	С	D	J	K	L	М	N	0	Р	Q	R	S	Т	U	V	W	Χ	Υ	Z
1																				
2	Tab Contents																			

Summary of storage and transmission GHG emissions results and minor calculations to develop results. The Demand Scenario results include emissions from hydrogen produced, stored, and transmitted by third-parties, in addition that hydrogen associated with Angeles Link. The Angeles Link results are specific to the hydrogen produced, stored, and transmitted within the Angeles Link system.

This tab includes the acronym PRJ. This refers to the project (PRJ) scenarios used in the calculation process (particularly for stationary sources). The PRJ scenario encompasses emissions for a sector or subsector including hydrogen adoption. Since infrastructure would only be present in the PRJ scenario, and therefore emissions would only occur in the PRJ scenario. The key findings reported in this study were change in emissions (due to hydrogen adoption either at a market level or as supplied by Angeles Link). While PRJ scenario information was used to develop certain results, this information is secondary to the core results of this study.

Market Scenario - Storage and Transmission - GHG

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Note: raw data was copied from "ALP1_GHG_S&T_2_CalcTool_SoCalGas.xlsx", tab "4.2 GHG Results".

PRJ GHG Emissions (MT CO2e/yr) - Conservative Conservative Overall GHG (MT CO2e) Year Transmission Power Scenario 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 Storage Scenario 2030 1,082.9 1,929.5 2,516.0 4,705.2 8,666.7 10,680.5 200 bar 812.7 1,453.6 3,227.9 3,967.5 5,441.5 6,180.5 6,931.6 7,764.2 9,639.6 11,788.6 Long Reciprocating 888.7 1,193.0 1,583.5 3,861.6 4,465.8 5,072.3 5,688.8 6,372.1 8,765.5 Long Reciprocating 20 bar 667.0 2,064.9 2,649.1 3,256.1 7,112.8 7,911.3 9,674.9 200 bar 1,126.9 1,512.7 2,007.9 3,359.0 4,128.7 4,896.4 5,662.5 6,431.6 7,213.3 8,079.6 10,031.3 12,267.5 Long Turbine 845.7 2,618.3 9,018.8 11,114.4 Turbine 20 bar 676.4 901.3 1,209.9 1,605.9 2,094.1 2,686.6 3,302.2 3,916.2 4,529.0 5,144.1 5,769.3 6,462.2 7,213.4 8,023.2 8,889.4 9,811.7 Long 1,453.6 Short 200 bar 812.7 1,082.9 1,929.5 2,516.0 3,227.9 3,967.5 4,705.2 5,441.5 6,180.5 6,931.6 7,764.2 8,666.7 9,639.6 10,680.5 11,788.6 Reciprocating Short Reciprocating 20 bar 667.0 888.7 1,193.0 1,583.5 2,064.9 2,649.1 3,256.1 3,861.6 4,465.8 5,072.3 5,688.8 6,372.1 7,112.8 7,911.3 8,765.5 9,674.9 Short 200 bar 1,126.9 1,512.7 2,007.9 2,618.3 3,359.0 4,128.7 4,896.4 5,662.5 6,431.6 7,213.3 8,079.6 10,031.3 12,267.5 Turbine 845.7 9,018.8 11,114.4 Short Turbine 20 bar 676.4 901.3 1,209.9 1,605.9 2,094.1 2,686.6 3,302.2 3,916.2 4,529.0 5,144.1 5,769.3 6,462.2 7,213.4 8,023.2 8,889.4 9,811.7

PRJ GHG E	missions (MT C	O2e/yr) - Moderate																
	Moderate	Overall GHG (MT CO2e)	Year															
Transmission	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Long	Reciprocating	200 bar	1,750.5	2,231.3	2,841.4	3,584.5	4,476.5	5,525.0	6,637.5	7,791.6	8,967.5	10,176.9	11,434.8	12,816.2	14,282.0	15,836.6	17,478.1	19,203.7
Long	Reciprocating	20 bar	1,436.6	1,831.2	2,331.9	2,941.8	3,673.9	4,534.3	5,447.4	6,394.6	7,359.7	8,352.2	9,384.5	10,518.2	11,721.2	12,997.1	14,344.3	15,760.5
Long	Turbine	200 bar	1,821.6	2,322.0	2,956.8	3,730.1	4,658.4	5,749.4	6,907.1	8,108.2	9,331.9	10,590.3	11,899.4	13,336.8	14,862.2	16,480.0	18,188.2	19,983.9
Long	Turbine	20 bar	1,457.0	1,857.1	2,364.9	2,983.4	3,725.9	4,598.5	5,524.4	6,485.0	7,463.8	8,470.3	9,517.3	10,667.0	11,887.0	13,180.9	14,547.1	15,983.4
Short	Reciprocating	200 bar	1,750.5	2,231.3	2,841.4	3,584.5	4,476.5	5,525.0	6,637.5	7,791.6	8,967.5	10,176.9	11,434.8	12,816.2	14,282.0	15,836.6	17,478.1	19,203.7
Short	Reciprocating	20 bar	1,436.6	1,831.2	2,331.9	2,941.8	3,673.9	4,534.3	5,447.4	6,394.6	7,359.7	8,352.2	9,384.5	10,518.2	11,721.2	12,997.1	14,344.3	15,760.5
Short	Turbine	200 bar	1,821.6	2,322.0	2,956.8	3,730.1	4,658.4	5,749.4	6,907.1	8,108.2	9,331.9	10,590.3	11,899.4	13,336.8	14,862.2	16,480.0	18,188.2	19,983.9
Short	Turbine	20 bar	1,457.0	1,857.1	2,364.9	2,983.4	3,725.9	4,598.5	5,524.4	6,485.0	7,463.8	8,470.3	9,517.3	10,667.0	11,887.0	13,180.9	14,547.1	15,983.4

	Ambitious	Overall GHG (MT CO2e)	Year															
Transmission	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Long	Reciprocating	200 bar	6,856.6	8,054.4	9,374.9	10,833.6	12,441.4	14,197.9	16,024.3	18,011.0	19,998.1	22,057.2	24,215.4	26,423.2	28,740.6	31,176.9	33,706.9	36,342.5
Long	Reciprocating	20 bar	5,627.2	6,610.3	7,694.0	8,891.1	10,210.7	11,652.2	13,151.2	14,781.7	16,412.5	18,102.4	19,873.6	21,685.6	23,587.4	25,586.9	27,663.3	29,826.3
Long	Turbine	200 bar	7,135.1	8,381.6	9,755.8	11,273.7	12,946.9	14,774.7	16,675.4	18,742.8	20,810.6	22,953.4	25,199.2	27,496.7	29,908.3	32,443.6	35,076.4	37,819.0
Long	Turbine	20 bar	5,706.8	6,703.8	7,802.8	9,016.9	10,355.1	11,817.0	13,337.2	14,990.7	16,644.6	18,358.4	20,154.6	21,992.3	23,921.1	25,948.8	28,054.6	30,248.2
Short	Reciprocating	200 bar	6,856.6	8,054.4	9,374.9	10,833.6	12,441.4	14,197.9	16,024.3	18,011.0	19,998.1	22,057.2	24,215.4	26,423.2	28,740.6	31,176.9	33,706.9	36,342.5
Short	Reciprocating	20 bar	5,627.2	6,610.3	7,694.0	8,891.1	10,210.7	11,652.2	13,151.2	14,781.7	16,412.5	18,102.4	19,873.6	21,685.6	23,587.4	25,586.9	27,663.3	29,826.3
Short	Turbine	200 bar	7,135.1	8,381.6	9,755.8	11,273.7	12,946.9	14,774.7	16,675.4	18,742.8	20,810.6	22,953.4	25,199.2	27,496.7	29,908.3	32,443.6	35,076.4	37,819.0
Short	Turbine	20 bar	5,706.8	6,703.8	7,802.8	9,016.9	10,355.1	11,817.0	13,337.2	14,990.7	16,644.6	18,358.4	20,154.6	21,992.3	23,921.1	25,948.8	28,054.6	30,248.2

	AA	AB	AC	AD	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY
1			7.0	1 /12	, , ,	7			7 7				7	7.0	7	7.0	7.1.	7	7.0.	7
2																				
3																				
4																				
6																				
		Angeles Link Throughpu	ıt Sconoria Stora	ago and Transmission	CHC															
/		Angeles Link Throughpu		ige and Transmission	- 0110															
8																				
9																				
10		AL PRJ GHG Emissions S&T	(MT CO2e/yr) - Low																	
11			Low	Overall GHG (MT CO2e)	Year															
12		Transmission Scenario	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038		2040	2041	2042	2043	2044	2045
13		Long	Reciprocating	200 bar	218.2	290.7	390.3	518.0	675.5	866.6	1,065.2	1,263.2	1,460.9	1,659.3	1,861.0	2,084.5	2,326.8	2,588.0	2,867.4	3,164.9
14		Long	Reciprocating	20 bar	179.1	238.6	320.3	425.1	554.4	711.2	874.2	1,036.7	1,199.0		1,527.3	1,710.7	1,909.6	2,124.0	2,353.3	2,597.5
15		Long	Turbine	200 bar	227.1	302.5	406.1	539.1	702.9	901.8	1,108.5	1,314.6	1,520.2	1,726.7	1,936.6	2,169.2	2,421.3	2,693.1	2,983.9	3,293.5
16		Long	Turbine	20 bar	181.6	242.0	324.8	431.2	562.2	721.3	886.6	1,051.4	1,215.9	1,381.1	1,548.9	1,734.9	1,936.6	2,154.0	2,386.6	2,634.2
17		Short	Reciprocating	200 bar	218.2	290.7	390.3	518.0	675.5	866.6	1,065.2	1,263.2	1,460.9	1,659.3	1,861.0	2,084.5	2,326.8	2,588.0	2,867.4	3,164.9
18		Short	Reciprocating	20 bar	179.1	238.6	320.3	425.1	554.4	711.2	874.2	1,036.7	1,199.0	1,361.8	1,527.3	1,710.7	1,909.6	2,124.0	2,353.3	2,597.5
19		Short	Turbine	200 bar	227.1	302.5	406.1	539.1	702.9	901.8	1,108.5	1,314.6	1,520.2	1,726.7	1,936.6	2,169.2	2,421.3	2,693.1	2,983.9	3,293.5
20		Short	Turbine	20 bar	181.6	242.0	324.8	431.2	562.2	721.3	886.6	1,051.4	1,215.9	1,381.1	1,548.9	1,734.9	1,936.6	2,154.0	2,386.6	2,634.2
22		<u> </u>																		
23		AL PRJ GHG Emissions S&T	(MT CO2e/yr) - Med	lium																
24			Medium	Overall GHG (MT CO2e)	Year															
25		Transmission Scenario	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
26		Long	Reciprocating	200 bar	544.8	694.5	884.3	1,115.6	1,393.2	1,719.5	2,065.8	2,425.0	2,791.0		3,558.9	3,988.8	4,445.0	4,928.9	5,439.7	5,976.8
27		Long	Reciprocating	20 bar	447.1	569.9	725.8	915.6	1,143.4	1,411.2	1,695.4	1,990.2	2,290.6		2,920.8	3,273.6	3,648.0	4,045.1	4,464.4	4,905.2
28		Long	Turbine	200 bar	566.9	722.7	920.3	1,160.9	1,449.8	1,789.4	2,149.7	2,523.5	2,904.4	3,296.0	3,703.5	4,150.9	4,625.6	5,129.1	5,660.7	6,219.6
29		Long	Turbine	20 bar	453.5	578.0	736.0	928.5	1,159.6	1,431.2	1,719.4	2,018.4	2,323.0	2,636.2	2,962.1	3,319.9	3,699.6	4,102.3	4,527.5	4,974.6
30		Short	Reciprocating	200 bar	544.8	694.5	884.3	1,115.6	1,393.2	1,719.5	2,065.8	2,425.0	2,791.0		3,558.9	3,988.8	4,445.0	4,928.9	5,439.7	5,976.8
31		Short	Reciprocating	20 bar	447.1	569.9	725.8	915.6	1,143.4	1,411.2	1,695.4	1,990.2	2,290.6	2,599.5	2,920.8	3,273.6	3,648.0	4,045.1	4,464.4	4,905.2
32		Short	Turbine	200 bar	566.9	722.7	920.3	1,160.9	1,449.8	1,789.4	2,149.7	2,523.5	2,904.4	3,296.0	3,703.5	4,150.9	4,625.6	5,129.1	5,660.7	6,219.6
33		Short	Turbine	20 bar	453.5	578.0	736.0	928.5	1,159.6	1,431.2	1,719.4	2,018.4	2,323.0	2,636.2	2,962.1	3,319.9	3,699.6	4,102.3	4,527.5	4,974.6
35 36		[/s.== aaa / 1 2																	
36		AL PRJ GHG Emissions S&T	· · · · · ·																	
37			High	Overall GHG (MT CO2e)	Year											,				
38 39		Transmission Scenario	Power Scenario	Storage Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
		Long	Reciprocating	200 bar	1,738.9	2,042.7	2,377.6	2,747.5	3,155.3	3,600.8	4,064.0	4,567.8	5,071.8		6,141.3	6,701.3	7,289.0	7,906.9	8,548.5	9,217.0
40		Long	Reciprocating	20 bar	1,427.1	1,676.5	1,951.3	2,254.9	2,589.6	2,955.2	3,335.3	3,748.8	4,162.4		5,040.2	5,499.8	5,982.1	6,489.2	7,015.8	7,564.4
41		Long	Turbine	200 bar	1,809.6	2,125.7	2,474.2	2,859.2	3,283.5	3,747.1	4,229.1	4,753.4	5,277.8		6,390.9	6,973.5	7,585.1	8,228.1	8,895.8	9,591.4
42		Long	Turbine	20 bar	1,447.3	1,700.2	1,978.9	2,286.8	2,626.2	2,997.0	3,382.5	3,801.9	4,221.3	4,655.9	5,111.5	5,577.5	6,066.7	6,581.0	7,115.0	7,671.3
43		Short	Reciprocating	200 bar	1,738.9	2,042.7	2,377.6	2,747.5	3,155.3	3,600.8	4,064.0	4,567.8	5,071.8		6,141.3	6,701.3	7,289.0	7,906.9	8,548.5	9,217.0
44		Short	Reciprocating	20 bar	1,427.1	1,676.5	1,951.3	2,254.9	2,589.6	2,955.2	3,335.3	3,748.8	4,162.4	4,591.0	5,040.2	5,499.8	5,982.1	6,489.2	7,015.8	7,564.4
45		Short	Turbine	200 bar	1,809.6	2,125.7	2,474.2	2,859.2	3,283.5	3,747.1	4,229.1	4,753.4	5,277.8		6,390.9	6,973.5	7,585.1	8,228.1	8,895.8	9,591.4
46		Short	Turbine	20 bar	1,447.3	1,700.2	1,978.9	2,286.8	2,626.2	2,997.0	3,382.5	3,801.9	4,221.3	4,655.9	5,111.5	5,577.5	6,066.7	6,581.0	7,115.0	7,671.3
48																				

Appendix C.2: Mobility

GHG Results, Calculations, and Data

	Α	В	D	E
1		Tab Contents		
2			rates which applications fall within each subse	ector within the Mobility
3		sector.		, , , , , , , , , , , , , , , , , , , ,
4				
5		Sector	Application	Subsector
7		Industrial Industrial	Food & Beverage Chemicals	Food & Beverage Chemicals
8		Industrial	Metals	Metals
9		Industrial	Paper	Paper
10		Industrial	Refineries	Refineries
11		Industrial	Stone/Gypsum	Stone, Glass & Cement
12		Industrial Industrial	Clay Cement	Stone, Glass & Cement Stone, Glass & Cement
14		Industrial	Glass	Stone, Glass & Cement
15		Industrial	Aerospace & Defense	Aerospace & Defense
16		Mobility	Agricultural Tractors	Agriculture
17		Mobility	ATVs	Agriculture
18 19		Mobility Mobility	Bale Wagons (Self Propelled) Balers (Self Propelled)	Agriculture Agriculture
20		Mobility	Combine Harvesters	Agriculture
21		Mobility	Construction Equipment	Agriculture
22		Mobility	Cotton Pickers	Agriculture
23		Mobility	Forage & Silage Harvesters	Agriculture
24		Mobility Mobility	Forklifts Hay Squeeze/Stack Retriever	Agriculture Agriculture
25 26		Mobility	Nut Harvester	Agriculture
27		Mobility	Other Harvesters	Agriculture
28		Mobility	Sprayers/Spray Rigs	Agriculture
29		Mobility	Swathers/Windrowers/Hay Conditioners	Agriculture
31		Mobility	All Other Buses	Bus
32		Mobility Mobility	Motor Coach OBUS	Bus Bus
34		Mobility	SBUS	Bus
35		Mobility	UBUS	Bus
36		Mobility	Barge/Dredge - AE	СНС
37 38		Mobility	Commercial Fishing - AE	CHC CHC
39		Mobility Mobility	Commercial Fishing - ME Excursion - AE	CHC
40		Mobility	Excursion - ME	CHC
41		Mobility	Ferry - AE	СНС
42		Mobility	Ferry - ME	CHC
43		Mobility Mobility	Other - AE Other - ME	CHC CHC
45		Mobility	Tugboat - AE	CHC
46		Mobility	Tugboat - ME	CHC
47		Mobility	AGV	CHE
48		Mobility	Bulldozer	CHE
49 50		Mobility Mobility	Cone vehicle Container Handling Equipment	CHE CHE
51		Mobility	Excavator	CHE
52		Mobility	Forklift	CHE
53		Mobility	Man Lift	CHE
54		Mobility	Port Crane	CHE CHE
55 56		Mobility Mobility	Rail Pusher RTG Crane	CHE
57		Mobility	Skid steer	CHE
58		Mobility	Tractor	CHE
59		Mobility	Truck	CHE
60		Mobility	Yard Truck	CHE Construction and Mining
61 62		Mobility Mobility	Asphalt Pavers Bore/Drill Rigs	Construction and Mining Construction and Mining
63		Mobility	Cement and Mortar Mixers	Construction and Mining
64		Mobility	Concrete/Industrial Saws	Construction and Mining
65		Mobility	Cranes	Construction and Mining
66		Mobility	Crawler Tractors	Construction and Mining
67 68		Mobility Mobility	Crushing/Proc. Equipment Dumpers/Tenders	Construction and Mining Construction and Mining
69		Mobility	Excavators	Construction and Mining
70		Mobility	Graders	Construction and Mining
71		Mobility	Off Highway Tractors	Construction and Mining

	Α	В	D	E
1		Tab Cardania		
2		Tab Contents This tab demonst	trates which applications fall within each sub	sector within the Mohility
3		sector.	traces which applications rail within each sub	sector within the Mobility
4				
5		Sector	Application	Subsector
72		Mobility	Off Highway Trucks	Construction and Mining
73		Mobility	Other	Construction and Mining
74		Mobility	Pavers	Construction and Mining
75 76		Mobility	Paving Equipment Plate Compactors	Construction and Mining
77		Mobility Mobility	Rollers	Construction and Mining Construction and Mining
78		Mobility	Rough Terrain Forklifts	Construction and Mining
79		Mobility	Rubber Tired Dozers	Construction and Mining
80		Mobility	Rubber Tired Loaders	Construction and Mining
81		Mobility	Scrapers	Construction and Mining
82		Mobility	Signal Boards	Construction and Mining
83		Mobility	Skid Steer Loaders	Construction and Mining
84		Mobility	Surfacing Equipment	Construction and Mining
85 86		Mobility Mobility	Tampers/Rammers Tractors/Loaders/Backhoes	Construction and Mining Construction and Mining
87		Mobility	Trenchers	Construction and Mining
88		Mobility	A/C TugNarrow Body	GSE
89		Mobility	A/C TugWide Body	GSE
90		Mobility	Air Conditioner	GSE
91		Mobility	Air Start Unit	GSE
92		Mobility	Baggage Tug	GSE
93		Mobility	Belt Loader	GSE
94 95		Mobility Mobility	Bobtail Cargo Loader	GSE GSE
96		Mobility	Cargo Tractor	GSE
97		Mobility	Cart	GSE
98		Mobility	Catering Truck	GSE
99		Mobility	Deicer	GSE
100		Mobility	Forklift	GSE
101		Mobility	Fuel Truck	GSE
102		Mobility	Generator	GSE
103 104		Mobility Mobility	Ground Power Unit Hydrant Truck	GSE GSE
105		Mobility	Lav Cart	GSE
106		Mobility	Lav Truck	GSE
107		Mobility	Lift	GSE
108		Mobility	Maint. Truck	GSE
109		Mobility	Other	GSE
110		Mobility	Passenger Stand	GSE
111 112		Mobility Mobility	Service Truck Sweeper	GSE GSE
113		Mobility	Sweeper Water Truck	GSE
118		Mobility	LHD1	MDV
119		Mobility	LHD2	MDV
120		Mobility	МН	MDV
121		Mobility	T6 CAIRP Class 4	MDV
122		Mobility	T6 CAIRP Class 5	MDV
123 124		Mobility Mobility	T6 CAIRP Class 6 T6 CAIRP Class 7	MDV MDV
125		Mobility	T6 Instate Delivery Class 4	MDV
126		Mobility	T6 Instate Delivery Class 5	MDV
127		Mobility	T6 Instate Delivery Class 6	MDV
128		Mobility	T6 Instate Delivery Class 7	MDV
129		Mobility	T6 Instate Other Class 4	MDV
130		Mobility	T6 Instate Other Class 5	MDV
131		Mobility	T6 Instate Other Class 6 T6 Instate Other Class 7	MDV
132 133		Mobility Mobility	T6 Instate Other Class 7 T6 Instate Tractor Class 6	MDV MDV
133		Mobility	T6 Instate Tractor Class 7	MDV
135		Mobility	T6 OOS Class 4	MDV
136		Mobility	T6 OOS Class 5	MDV
137		Mobility	T6 OOS Class 6	MDV
138		Mobility	T6 OOS Class 7	MDV
139		Mobility	T6 Public Class 4	MDV
140		Mobility	T6 Public Class 5	MDV

	Α	В	D	Е
1				
2		Tab Contents		
		This tab demons	trates which applications fall within each subse	ctor within the Mobility
3		sector.		
4				
5		Sector	Application	Subsector
141		Mobility	T6 Public Class 6	MDV
142		Mobility	T6 Public Class 7	MDV
143		Mobility	T6 Utility Class 5	MDV
144		Mobility	T6 Utility Class 6	MDV
145		Mobility	T6 Utility Class 7	MDV
146		Mobility	T6TS	MDV
147		Mobility	T7 CAIRP Class 8	HDV
148		Mobility	T7 NNOOS Class 8	HDV
149		Mobility	T7 NOOS Class 8	HDV
150		Mobility	T7 Other Port Class 8	HDV
151		Mobility	T7 POAK Class 8	HDV
152		Mobility	T7 POLA Class 8	HDV
153		Mobility	T7 Public Class 8	HDV
154		Mobility	T7 Single Concrete/Transit Mix Class 8	HDV
155		Mobility	T7 Single Dump Class 8	HDV
156		Mobility	T7 Single Other Class 8	HDV
157		Mobility	T7 SWCV Class 8	HDV
158		Mobility	T7 Tractor Class 8	HDV
159		Mobility	T7 Utility Class 8	HDV
160		Mobility	T7IS	HDV
170		Power	Turbines	Baseload & Peaker

	А	В	С	D	E	F	G	Н
1			•					
2		Tab Contents						
		This tab outlines		•		•		
		subsector, year,		• •		_	ta and	
		weighting is occ						
		"Offroad_GHG_					ors. Offoad CH4	
3		and N2O emission	on factor	s are pulling t	rom tab "OffRo	adCH4N2O".		
4		la .	l.,	<u> </u>				ı
5	On Dood	Subsector	Year	Fuel Type			N2O (MT/gal)	
74 75	On-Road On-Road	MDV MDV		Diesel Diesel	0.010155477 0.010155477	3.64602E-08 3.49377E-08	1.6E-06 1.6E-06	1
76	On-Road	MDV		Diesel	0.010155477	3.36813E-08	1.6E-06	
77	On-Road	MDV		Diesel	0.010155477	3.24968E-08	1.6E-06	İ
78	On-Road	MDV		Diesel	0.010155477	3.16373E-08	1.6E-06	1
79	On-Road	MDV		Diesel	0.010155477	3.075E-08	1.6E-06	1
80	On-Road	MDV	2036	Diesel	0.010155477	2.99234E-08	1.6E-06	
81	On-Road	MDV	2037	Diesel	0.010155477	2.9035E-08	1.6E-06	
82	On-Road	MDV	2038	Diesel	0.010155477	2.80134E-08	1.6E-06	
83	On-Road	MDV		Diesel	0.010155477	2.72039E-08	1.6E-06	
84	On-Road	MDV		Diesel	0.010155477	2.64451E-08	1.6E-06	
85	On-Road	MDV		Diesel	0.010155477	2.57975E-08	1.6E-06	
86	On-Road	MDV		Diesel	0.010155477	2.51632E-08	1.6E-06	1
87	On-Road	MDV		Diesel	0.010155477	2.46456E-08	1.6E-06	1
88	On-Road	MDV MDV		Diesel Diesel	0.010155477 0.010155477	2.40082E-08 2.34504E-08	1.6E-06 1.6E-06	4
95	On-Road On-Road	MDV		Gasoline	0.010155477	2.34504E-08 1.88255E-07	2.64375E-07	
96	On-Road	MDV		Gasoline	0.008603087	1.8178E-07	2.59017E-07	
97	On-Road	MDV		Gasoline	0.008603087	1.76071E-07	2.54931E-07	
98	On-Road	MDV		Gasoline	0.008603087	1.74261E-07	2.52722E-07	
		MDV		Gasoline	0.008603087			
100	On-Road	MDV	2035	Gasoline	0.008603087	1.71425E-07	2.48597E-07	
101	On-Road	MDV	2036	Gasoline	0.008603087	1.70096E-07	2.46965E-07	
102	On-Road	MDV	2037	Gasoline	0.008603087	1.68771E-07	2.45264E-07	
	On-Road	MDV	-	Gasoline	0.008603087	1.67525E-07	2.44087E-07	
	On-Road	MDV		Gasoline	0.008603087	1.65803E-07	2.42123E-07	
_	On-Road	MDV		Gasoline	0.008603087	1.63659E-07	2.39845E-07	
	On-Road On-Road	MDV MDV		Gasoline Gasoline	0.008603087 0.008603087	1.6235E-07 1.60736E-07	2.3841E-07 2.37328E-07	
	On-Road	MDV		Gasoline	0.008603087	1.59269E-07	2.36583E-07	
_	On-Road	MDV		Gasoline	0.008603087	1.57227E-07	2.35941E-07	
	On-Road	MDV	-	Gasoline	0.008603087	1.54682E-07	2.3495E-07	
137	On-Road	HDV	2030	Diesel	0.010155477	1.81252E-08	1.6E-06	
138	On-Road	HDV	2031	Diesel	0.010155477	1.82993E-08	1.6E-06	
139	On-Road	HDV	2032	Diesel	0.010155477	1.84603E-08	1.6E-06	
	On-Road	HDV		Diesel	0.010155477	1.85962E-08	1.6E-06	1
-	On-Road	HDV		Diesel	0.010155477	1.87146E-08	1.6E-06	1
	On-Road	HDV	-	Diesel	0.010155477	1.88148E-08	1.6E-06	1
	On-Road	HDV	-	Diesel	0.010155477	1.89556E-08	1.6E-06	1
	On-Road	HDV		Diesel	0.010155477 0.010155477	1.90821E-08 1.91944E-08	1.6E-06	ł
_	On-Road On-Road	HDV HDV		Diesel Diesel	0.010155477	1.91944E-08 1.92982E-08	1.6E-06 1.6E-06	1
-	On-Road	HDV	-	Diesel	0.010155477	1.92982E-08 1.93944E-08	1.6E-06	ł
	On-Road	HDV		Diesel	0.010155477	1.94842E-08		1
	On-Road	HDV		Diesel	0.010155477	1.95648E-08	1.6E-06	1
150	On-Road	HDV	2043	Diesel	0.010155477	1.9639E-08	1.6E-06	
151	On-Road	HDV	2044	Diesel	0.010155477	1.9708E-08	1.6E-06	
	On-Road	HDV	2045	Diesel	0.010155477	1.97708E-08	1.6E-06	
-	On-Road	HDV	-	Gasoline	0.008603087	3.73337E-07	5.7887E-07	
	On-Road	HDV		Gasoline	0.008603087	3.61487E-07	5.68667E-07	
	On-Road	HDV		Gasoline	0.008603087	3.596E-07		
-		HDV		Gasoline		3.61373E-07		
	On-Road	HDV	-	Gasoline	0.008603087	3.60603E-07	5.58252E-07	
	On-Road On-Road	HDV HDV		Gasoline Gasoline	0.008603087 0.008603087	3.61864E-07 3.6656E-07	5.58758E-07 5.56485E-07	
	On-Road	HDV	-	Gasoline	0.008603087	3.70179E-07	5.51558E-07	
	On-Road	HDV	-	Gasoline	0.008603087	3.70173E-07 3.72093E-07	5.46868E-07	
	On-Road	HDV		Gasoline	0.008603087	3.73707E-07	5.42346E-07	1
		!						

	A	В	С	D	E	F	G
5	A	Subsector	Year	Fuel Type	CO2 (MT/gal)		
	On-Road	HDV		Gasoline	0.008603087		5.38901E-07
	On-Road	HDV		Gasoline	0.008603087	3.77473E-07	5.35402E-07
\vdash	On-Road	HDV		Gasoline	0.008603087	3.77739E-07	5.25207E-07
	On-Road	HDV		Gasoline	0.008603087	3.77105E-07	5.25919E-07
-	On-Road	HDV		Gasoline	0.008603087	3.76302E-07	5.30663E-07
\vdash	On-Road	HDV		Gasoline	0.008603087	3.7494E-07	5.37994E-07
_	On-Road	Bus		Diesel	0.010155477	2.62045E-08	1.6E-06
	On-Road	Bus		Diesel	0.010155477	2.51679E-08	1.6E-06
-	On-Road	Bus		Diesel	0.010133477	2.40176E-08	1.6E-06
\vdash							
	On-Road	Bus		Diesel	0.010155477	2.27905E-08	1.6E-06
	On-Road	Bus		Diesel	0.010155477	2.15739E-08	1.6E-06
-	On-Road	Bus		Diesel	0.010155477	2.03711E-08	1.6E-06
\vdash	On-Road	Bus		Diesel	0.010155477	1.9361E-08	1.6E-06
	On-Road	Bus		Diesel	0.010155477	1.83713E-08	1.6E-06
-	On-Road	Bus		Diesel	0.010155477	1.74148E-08	1.6E-06
\vdash	On-Road	Bus		Diesel	0.010155477		1.6E-06
	On-Road	Bus		Diesel	0.010155477	1.54172E-08	1.6E-06
	On-Road	Bus		Diesel	0.010155477	1.45385E-08	1.6E-06
212	On-Road	Bus	2042	Diesel	0.010155477	1.35036E-08	1.6E-06
\vdash	On-Road	Bus		Diesel	0.010155477	1.26057E-08	1.6E-06
214	On-Road	Bus	2044	Diesel	0.010155477	1.19026E-08	1.6E-06
215	On-Road	Bus	2045	Diesel	0.010155477	1.13357E-08	1.6E-06
221	On-Road	Bus	2030	Gasoline	0.008603087	2.62008E-07	1.89996E-07
222	On-Road	Bus	2031	Gasoline	0.008603087	2.65636E-07	1.88366E-07
223	On-Road	Bus	2032	Gasoline	0.008603087	2.6737E-07	1.85802E-07
	On-Road	Bus		Gasoline	0.008603087	2.69088E-07	1.80784E-07
	On-Road	Bus		Gasoline	0.008603087	2.69517E-07	1.75757E-07
226	On-Road	Bus	2035	Gasoline	0.008603087	2.77899E-07	1.72236E-07
-	On-Road	Bus		Gasoline	0.008603087	2.79223E-07	1.70786E-07
\vdash	On-Road	Bus		Gasoline	0.008603087	2.86854E-07	1.72526E-07
\vdash	On-Road	Bus		Gasoline	0.008603087	2.91856E-07	1.72672E-07
	On-Road	Bus		Gasoline	0.008603087	3.02935E-07	1.7252E-07
-	On-Road	Bus		Gasoline	0.008603087	3.09833E-07	1.7068E-07
_	On-Road	Bus		Gasoline	0.008603087	3.05331E-07	1.66396E-07
						3.02348E-07	
\vdash	On-Road	Bus		Gasoline	0.008603087		1.64423E-07
-	On-Road	Bus			0.008603087	3.01539E-07	1.67449E-07
\vdash	On-Road	Bus		Gasoline	0.008603087	2.98448E-07	1.69203E-07
	On-Road	Bus		Gasoline	0.008603087	2.93843E-07	1.69821E-07
-	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
-	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
\vdash	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
-	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
	Off-Road	Agriculture	2036	Diesel	0.010179997	0.00000127	0.00000107
270	Off-Road	Agriculture	2037	Diesel	0.010179997	0.00000127	0.00000107
271	Off-Road	Agriculture	2038	Diesel	0.010179997	0.00000127	0.00000107
272	Off-Road	Agriculture	2039	Diesel	0.010179997	0.00000127	0.00000107
273	Off-Road	Agriculture	2040	Diesel	0.010179997	0.00000127	0.00000107
274	Off-Road	Agriculture	2041	Diesel	0.010179997	0.00000127	0.00000107
275	Off-Road	Agriculture	2042	Diesel	0.010179997	0.00000127	0.00000107
276	Off-Road	Agriculture	2043	Diesel	0.010179997	0.00000127	0.00000107
277	Off-Road	Agriculture	2044	Diesel	0.010179997	0.00000127	0.00000107
	Off-Road	Agriculture		Diesel	0.010179997	0.00000127	0.00000107
	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
285	Off-Road	Agriculture	2031	Gasoline	0.010216997	0.00000193	0.0000012
	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
$\overline{}$	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
		Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
	Off-Road	Agriculture		Gasoline	0.010216997		0.0000012
	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
	Off-Road	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
7021	JII NOAU	Agriculture		Gasoline	0.010216997	0.00000193	0.0000012
	Off-Pood	//gricuitule		Gasoline	0.010216997	0.00000193	0.0000012
294	Off-Road	Agricultura		Jasuille	0.010216997		
294 295	Off-Road	Agriculture		Casalin -		0.00000193	0.0000012
294 295 296	Off-Road Off-Road	Agriculture	2042	Gasoline			0.0000015
294 295 296 297	Off-Road Off-Road Off-Road	Agriculture Agriculture	2042 2043	Gasoline	0.010216997	0.00000193	0.0000012
294 295 296 297 298	Off-Road Off-Road Off-Road	Agriculture Agriculture Agriculture	2042 2043 2044	Gasoline Gasoline	0.010216997 0.010216997	0.00000193 0.00000193	0.0000012
294 295 296 297 298 299	Off-Road Off-Road Off-Road Off-Road	Agriculture Agriculture Agriculture Agriculture	2042 2043 2044 2045	Gasoline Gasoline Gasoline	0.010216997 0.010216997 0.010216997	0.00000193 0.00000193 0.00000193	0.0000012 0.0000012
294 295 296 297 298 299 326	Off-Road Off-Road Off-Road Off-Road Off-Road Off-Road	Agriculture Agriculture Agriculture Agriculture CHC	2042 2043 2044 2045 2030	Gasoline Gasoline Gasoline Diesel	0.010216997 0.010216997 0.010216997 0.00938165	0.00000193 0.00000193 0.00000193 0.00000641	0.0000012 0.0000012 0.00000017
294 295 296 297 298 299 326 327	Off-Road Off-Road Off-Road Off-Road Off-Road Off-Road Off-Road	Agriculture Agriculture Agriculture Agriculture CHC CHC	2042 2043 2044 2045 2030 2031	Gasoline Gasoline Gasoline Diesel Diesel	0.010216997 0.010216997 0.010216997 0.00938165 0.009325812	0.00000193 0.00000193 0.00000193 0.00000641 0.00000641	0.0000012 0.0000012 0.00000017 0.00000017
294 295 296 297 298 299 326 327 328	Off-Road Off-Road Off-Road Off-Road Off-Road Off-Road Off-Road Off-Road	Agriculture Agriculture Agriculture Agriculture CHC	2042 2043 2044 2045 2030 2031 2032	Gasoline Gasoline Gasoline Diesel	0.010216997 0.010216997 0.010216997 0.00938165	0.00000193 0.00000193 0.00000193 0.00000641	0.0000012 0.0000012 0.00000017

	Α	В	С	D	Е	F	G
5		Subsector	Year	Fuel Type			N2O (MT/gal)
	Off-Road	СНС		Diesel	0.009324786	0.00000641	
	Off-Road	СНС		Diesel	0.009324422	0.00000641	0.00000017
	Off-Road	СНС		Diesel	0.009324045	0.00000641	
	Off-Road	CHC		Diesel	0.009323666	0.00000641	0.00000017
	Off-Road	СНС		Diesel	0.009323274	0.00000641	
	Off-Road	СНС		Diesel	0.009322868	0.00000641	0.00000017
	Off-Road	СНС		Diesel	0.009322406	0.00000641	0.00000017
337	Off-Road	СНС	2041	Diesel	0.009321924	0.00000641	0.00000017
338	Off-Road	СНС	2042	Diesel	0.009321415	0.00000641	0.00000017
339	Off-Road	СНС	2043	Diesel	0.009320875	0.00000641	0.00000017
340	Off-Road	СНС	2044	Diesel	0.009320315	0.00000641	0.00000017
341	Off-Road	CHC	2045	Diesel	0.009319733	0.00000641	0.00000017
347	Off-Road	CHC	2030	Gasoline	0	0	0
348	Off-Road	CHC	2031	Gasoline	0	0	0
349	Off-Road	СНС	2032	Gasoline	0	0	0
350	Off-Road	СНС	2033	Gasoline	0	0	0
351	Off-Road	СНС	2034	Gasoline	0	0	0
	Off-Road	СНС	2035	Gasoline	0	0	0
	Off-Road	СНС	2036	Gasoline	0	0	0
	Off-Road	СНС	2037		0	0	0
	Off-Road	CHC	2038	Gasoline	0	0	0
	Off-Road	CHC		Gasoline	0	0	0
	Off-Road	СНС		Gasoline	0	0	0
	Off-Road	СНС	-	Gasoline	0	0	0
	Off-Road	СНС	2042		0	0	0
	Off-Road	СНС		Gasoline	0	0	0
	Off-Road	СНС		Gasoline	0	0	0
—	Off-Road	СНС	-	Gasoline	0	0	0
	Off-Road	CHE		Diesel	0.010179997		
	Off-Road	CHE	-	Diesel	0.010179997	0.00000041	0.0000006
-	Off-Road	CHE	-	Diesel	0.010179997	0.00000041	
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
\vdash	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road Off-Road	CHE		Diesel Diesel	0.010179997 0.010179997	0.00000041 0.00000041	0.0000006 0.0000006
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
—	Off-Road	CHE	-	Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE	-	Diesel	0.010179997	0.00000041	
	Off-Road	CHE		Diesel	0.010179997	0.00000041	0.0000006
	Off-Road	CHE		Gasoline	0.010206	0.00000274	
\vdash	Off-Road	CHE	-	Gasoline	0.010206	0.00000274	
	Off-Road	CHE		Gasoline	0.010206	0.00000274	0.00000154
	Off-Road	CHE		Gasoline	0.010206		
	Off-Road	CHE	-	Gasoline	0.010206	0.00000274	
	Off-Road	CHE	-	Gasoline	0.010206		
	Off-Road	CHE	-	Gasoline	0.010206	0.00000274	
	Off-Road	CHE	2037	Gasoline	0.010206	0.00000274	0.00000154
418	Off-Road	CHE	2038	Gasoline	0.010206		0.00000154
419	Off-Road	CHE	2039	Gasoline	0.010206	0.00000274	0.00000154
420	Off-Road	CHE	2040	Gasoline	0.010206	0.00000274	0.00000154
421	Off-Road	CHE	2041	Gasoline	0.010206	0.00000274	0.00000154
422	Off-Road	CHE	2042	Gasoline	0.010206	0.00000274	0.00000154
423	Off-Road	CHE	2043	Gasoline	0.010206	0.00000274	0.00000154
	Off-Road	CHE		Gasoline	0.010206		
425	Off-Road	CHE	2045	Gasoline	0.010206	0.00000274	0.00000154

	А	В	С	D	Е	F	G	Н
5		Subsector	Year	Fuel Type	CO2 (MT/gal)			i i
452	Off-Road	C&M		Diesel	0.01018989	0.00000101		ĺ
453	Off-Road	C&M	2031	Diesel	0.01018989	0.00000101	0.00000094	
454	Off-Road	C&M	2032	Diesel	0.01018989	0.00000101	0.00000094	
455	Off-Road	C&M	2033	Diesel	0.01018989	0.00000101	0.00000094	
456	Off-Road	C&M	2034	Diesel	0.01018989	0.00000101	0.00000094	
457	Off-Road	C&M	2035	Diesel	0.01018989	0.00000101	0.00000094	
458	Off-Road	C&M	2036	Diesel	0.01018989	0.00000101	0.00000094	
459	Off-Road	C&M	2037	Diesel	0.01018989	0.00000101	0.00000094	
460	Off-Road	C&M	2038	Diesel	0.010189889	0.00000101	0.00000094	
461	Off-Road	C&M	2039	Diesel	0.010189889	0.00000101	0.00000094	
462	Off-Road	C&M	2040	Diesel	0.010189889	0.00000101	0.00000094	
463	Off-Road	C&M	2041	Diesel	0.010189889	0.00000101	0.00000094	
	Off-Road	C&M	2042	Diesel	0.010189889	0.00000101	0.00000094	
	Off-Road	C&M		Diesel	0.010189889	0.00000101	0.00000094	
	Off-Road	C&M		Diesel	0.010189889	0.00000101	0.00000094	
467	Off-Road	C&M		Diesel	0.010189889	0.00000101	0.00000094	
	Off-Road	C&M		Gasoline	0.003868499	0.00000285	0.00000147	
	Off-Road	C&M	2031	Gasoline	0.003862112	0.00000285	0.00000147	
	Off-Road	C&M	2032		0.00385468	0.00000285	0.00000147	
	Off-Road	C&M		Gasoline	0.003847396	0.00000285	0.00000147	
477	Off-Road	C&M	2034	Gasoline	0.003839587	0.00000285	0.00000147	
	Off-Road	C&M		Gasoline	0.003831887	0.00000285	0.00000147	l
479	Off-Road	C&M			0.003824265	0.00000285	0.00000147	
—	Off-Road	C&M	2037	Gasoline	0.003816375	0.00000285	0.00000147	
481		C&M			0.00380855	0.00000285	0.00000147	ı
482	Off-Road	C&M	2039	Gasoline	0.003801051	0.00000285	0.00000147	
	Off-Road	C&M	2040	Gasoline	0.003793962	0.00000285	0.00000147	
484	Off-Road Off-Road	C&M	2041	Gasoline	0.003793477	0.00000285	0.00000147	ĺ
	Off-Road	C&M C&M		Gasoline Gasoline	0.003793342 0.003795193	0.00000285 0.00000285		i
	Off-Road	C&M		Gasoline	0.003793193	0.00000283	0.00000147	
	Off-Road	C&M	-	Gasoline	0.003798013	0.00000285		
	Off-Road	GSE		Diesel	0.010189895	0.00000283		
	Off-Road	GSE		Diesel	0.010189895	0.00000188		
—	Off-Road	GSE	-	Diesel	0.010189895	0.00000188		
	Off-Road	GSE	-	Diesel	0.010189895	0.00000188		4
	Off-Road	GSE		Diesel	0.010189895	0.00000188		1
	Off-Road	GSE	-	Diesel	0.010189895	0.00000188	0.00000116	
—	Off-Road	GSE	-	Diesel	0.010189895	0.00000188		1
522	Off-Road	GSE		Diesel	0.010189895	0.00000188	0.00000116	
	Off-Road	GSE		Diesel	0.010189895	0.00000188		1
524	Off-Road	GSE	2039	Diesel	0.010189895	0.00000188	0.00000116	
$\overline{}$	Off-Road	GSE	-	Diesel	0.010189895	0.00000188		1
526	Off-Road	GSE	2041	Diesel	0.010189895	0.00000188	0.00000116	
527	Off-Road	GSE	2042	Diesel	0.010189895	0.00000188	0.00000116	
528	Off-Road	GSE	2043	Diesel	0.010189895	0.00000188	0.00000116	
	Off-Road	GSE	2044	Diesel	0.010189895	0.00000188	0.00000116	
530	Off-Road	GSE	2045	Diesel	0.010189895	0.00000188	0.00000116	
	Off-Road	GSE	-	Gasoline	0.0080101	0.00000103		
	Off-Road	GSE		Gasoline	0.008007527	0.00000103	0.00000107	
	Off-Road	GSE		Gasoline	0.008015614	0.00000103		
	Off-Road	GSE		Gasoline	0.008018626	0.00000103	0.00000107	
	Off-Road	GSE		Gasoline	0.008018457	0.00000103		
	Off-Road	GSE		Gasoline	0.008018282	0.00000103		
	Off-Road	GSE		Gasoline	0.008017699	0.00000103		
	Off-Road	GSE	2037	Gasoline	0.008017945	0.00000103		
	Off-Road	GSE		Gasoline	0.008017547	0.00000103	0.00000107	
	Off-Road	GSE		Gasoline	0.008016899	0.00000103		
	Off-Road	GSE	-	Gasoline	0.008015724	0.00000103		
	Off-Road	GSE	-	Gasoline	0.008015725	0.00000103		
	Off-Road	GSE		Gasoline	0.008015725	0.00000103		l
	Off-Road	GSE		Gasoline	0.008015726	0.00000103		ĺ
	Off-Road	GSE		Gasoline	0.008015726	0.00000103		l
551	Off-Road	GSE	2045	Gasoline	0.008015726	0.00000103	0.00000107	

A	В	С	D	E	F	G	Н	I	J
<u>1</u> 2			ſ	Tab Contents]				
				This tab calculates the percentages provided volume of gasoline ar	by the Demand St nd diesel displaced	tudy as represented of by market adoption	splaced specifically by a conthe tab titled, "AL_\of FCEVs, as provided loolune by the emission	olumes". It also do	emonstrates the
3									
4									
5						Market Displace	d Volumes (gal)		
_						Warket Displaced	Volumes (gai)		
6				Discol	Discol	Piacel	Casalina	Casalina	Casalina
6				Diesel	Diesel	Diesel	Gasoline	Gasoline	Gasoline
7	On or Off Road	Subsector	Year	Conservative Scenario	Moderate Scenario	Ambitious Scenario	Conservative Scenario	Moderate Scenario	Ambitious Scenario
8	On-Road	MDV	2030	5,031,766.71	10,607,517.29	19,960,996.51	3,919,358.01	7,227,232.02	13,105,215.30
)	On-Road	MDV	2031	7,029,232.57	13,466,269.78	24,655,434.03	5,767,603.82	9,738,544.74	17,096,824.14
)	On-Road	MDV	2032	9,640,199.41	16,888,985.35	29,637,297.53	8,370,993.21	13,089,263.86	21,928,386.37
1	On-Road	MDV	2033	12,931,915.16	20,925,108.28	34,887,369.99	11,793,309.45	17,281,924.52	27,423,029.16
2	On-Road	MDV	2034	16,963,221.29	25,616,590.29	40,382,047.98	16,134,081.51	22,372,195.59	33,499,361.81
3	On-Road	MDV	2035	21,766,190.95	30,973,547.03	46,060,831.16	21,483,869.21	28,412,982.70	40,086,718.03
ļ	On-Road	MDV	2036	26,509,629.84	36,150,217.29	51,412,555.51	26,779,795.55	34,292,710.68	46,376,225.20
5	On-Road	MDV	2037	31,167,907.10	41,130,498.00	56,454,446.64	31,869,524.39	39,848,360.03	52,215,567.87
5	On-Road	MDV	2038	35,796,603.28	45,980,269.65	61,264,370.88	36,763,273.10	45,101,316.25	57,640,552.64
7	On-Road	MDV	2039	40,421,931.20	50,729,595.72	65,875,454.00	41,507,610.49	50,105,779.02	62,713,420.88
	On-Road	MDV	2040	45,081,694.63	55,421,796.43	70,336,039.98	46,020,795.09	54,776,169.09	67,343,979.05
)	On-Road	MDV	2041	49,833,665.49	60,238,170.41	74,973,896.08	50,257,920.67	59,156,557.81	71,682,869.34
	On-Road On-Road	MDV MDV	2042	54,671,508.88	65,177,192.78	79,792,207.13	54,150,885.55	63,176,571.07	75,656,761.13
2	On-Road	MDV	2043	59,609,682.92 64,586,031.21	70,253,378.98 75,396,584.60	84,804,457.91 89,930,611.40	57,807,453.59 61,105,039.59	66,954,032.06 70,352,961.65	
3	On-Road	MDV	2044	69,657,271.45	80,667,539.66	95,234,846.31	64,110,082.44	73,445,497.23	82,742,467.94 85,780,462.14
1	On-Road	HDV	2030	38,033,416.37	114,100,249.12	232,615,673.19	-	-	-
;	On-Road	HDV	2031	50,792,817.43	138,107,864.62	276,666,771.91	-	-	_
5	On-Road	HDV	2032	71,914,221.89	170,610,255.17	326,947,395.13	147.42	226.81	361.76
7	On-Road	HDV	2033	102,002,336.55	212,170,882.58	383,779,180.76	570.19	787.85	1,145.64
3	On-Road	HDV	2034	141,726,487.77	263,461,608.65	447,690,250.87	1,141.15	1,465.40	1,976.91
	On-Road	HDV	2035	191,736,336.72	325,085,848.17	519,060,659.82	2,005.57	2,409.38	3,003.34
	On-Road	HDV	2036	238,749,948.58	382,976,332.41	585,938,823.09	2,979.35	3,472.03	4,157.47
-	On-Road	HDV	2037	282,773,595.39	437,246,215.32	648,820,363.22	4,005.26	4,592.44	5,375.88
2	On-Road	HDV	2038	324,175,243.03	488,373,158.72	708,297,214.59	5,035.42	5,717.92	6,600.53
3	On-Road	HDV	2039	363,293,773.91	536,793,888.20	764,886,415.35	6,066.41	6,844.71	7,827.32
4	On-Road	HDV	2040	400,487,520.84	582,975,786.48	819,150,320.82	7,004.26	7,869.11	8,941.61
5	On-Road	HDV	2041	443,030,681.05	631,147,953.85	871,561,903.10	7,954.58	8,907.69	10,072.30
6	On-Road	HDV	2042	491,415,703.50	681,633,512.42	922,210,153.54	8,868.58	9,906.59	11,159.77
37	On-Road	HDV	2043	545,543,650.43	734,527,472.92	971,401,118.53	9,786.23	10,909.84	12,252.66

1 A	В	С	D	E	F	G	Н	I	J
<u>1</u>				Tab Contents					
3				This tab calculates the percentages provided volume of gasoline ar	by the Demand St d diesel displaced	tudy as represented of by market adoption of	splaced specifically by on the tab titled, "AL_\of FCEVs, as provided volume by the emission	Volumes". It also do	emonstrates the
5				Diesel	Diesel		Gasoline	Gasoline	Gasoline
7	On or Off Road	Subsector	Year		Moderate Scenario		Conservative Scenario	Moderate Scenario	Ambitious Scenario
38	On-Road	HDV	2044	605,185,543.72	789,787,785.60	1,019,298,701.67	10,668.85	11,874.79	13,303.79
9	On-Road	HDV	2045	670,094,104.60	847,329,791.45	1,065,997,550.85	11,463.26	12,742.79	14,248.44
.0	On-Road	Bus	2030	2,744,478.52	5,668,100.97	10,487,814.17	41,655,936.59	86,106,404.81	159,342,697.44
1	On-Road	Bus	2031	3,563,454.40	6,613,998.31	11,860,862.13	54,370,480.75	101,001,117.85	181,156,540.80
2	On-Road	Bus	2032	4,500,173.88	7,613,987.74	13,086,957.27	68,697,365.69	116,417,332.29	200,225,710.29
3	On-Road	Bus	2033	5,531,519.12	8,646,954.60	14,153,826.60	84,478,725.32	132,308,365.05	216,786,620.87
4	On-Road	Bus	2034	6,675,698.62	9,741,178.18	15,114,636.74	101,565,123.63	148,622,813.31	231,070,804.23
5	On-Road	Bus	2035	7,933,439.62	10,900,931.21	15,984,683.06	119,819,423.62	165,311,885.40	243,291,952.10
5	On-Road	Bus	2036		11,926,372.11	16,729,011.72	146,948,644.89	191,985,477.00	266,829,381.49
7	On-Road	Bus	2037	10,048,537.22	12,829,033.60	17,374,029.48	172,880,530.86	217,522,549.14	289,441,048.76
<u>8</u> 9	On-Road On-Road	Bus Bus	2038 2039	, ,	13,609,162.09	17,917,764.16	197,121,422.38	241,477,310.53	310,820,958.30
2	On-Road	Bus	2039	11,663,397.14 12,304,307.50	14,279,693.90 14,845,125.92	18,371,425.25 18,736,986.59	219,771,714.03 240,971,524.00	263,946,497.94 285,060,889.38	331,050,987.60 350,232,222.44
1	On-Road	Bus	2040		15,282,708.64	18,986,819.92	260,859,248.85	304,950,001.83	368,465,471.72
2	On-Road	Bus	2042		15,722,824.78	19,262,225.97	279,533,624.64	323,701,398.92	385,808,459.02
3	On-Road	Bus	2043		16,196,756.27	19,594,233.04	297,107,451.51	341,420,019.14	402,341,517.07
4	On-Road	Bus	2044		16,608,857.92	19,875,578.06	313,649,779.18	358,164,326.32	418,096,878.11
5	On-Road	Bus	2045		16,962,215.14	20,108,889.31	329,297,482.27	374,069,112.04	433,193,896.09
6	Off-Road	Agriculture	2030	643,716.92	1,050,912.11	1,603,918.04	53,610.66	87,018.05	132,467.97
7	Off-Road	Agriculture	2031	904,579.65	1,445,117.63	2,177,588.72	76,049.93	120,365.17	180,603.52
3	Off-Road	Agriculture	2032		1,874,193.66	2,802,565.58	100,129.45	156,724.26	232,891.90
	Off-Road	Agriculture	2033		2,336,580.15	3,476,497.07	125,668.15	195,935.59	289,095.04
	Off-Road	Agriculture	2034		2,830,904.08	4,197,236.61	152,493.68	237,841.12	348,982.55
1	Off-Road	Agriculture	2035		3,355,811.10	4,962,672.29	180,450.63	282,296.65	412,345.67
2	Off-Road	Agriculture	2036		3,937,074.55	5,743,050.09	216,063.45	331,730.90	477,384.31
3	Off-Road	Agriculture	2037	2,998,839.81	4,576,483.19	6,533,296.44	259,952.60	386,287.68	543,711.90
54	Off-Road	Agriculture	2038		5,273,962.18	7,330,576.20	312,310.86	445,948.94	611,057.15
65 66	Off-Road Off-Road	Agriculture	2039 2040		6,029,125.81	8,132,477.85	373,245.95	510,656.54	679,160.49
ri i	JOH-KOAU	Agriculture	2040	5,114,374.98	6,841,403.57	8,936,819.33	442,837.39	580,355.84	747,803.93

Α	В	С	D	E	F	G	Н	I	J
<u>-</u>				Tab Contents					
3				percentages provided volume of gasoline ar	by the Demand St d diesel displaced	tudy as represented of by market adoption of	splaced specifically by on the tab titled, "AL_\of FCEVs, as provided wolume by the emission of the control of	Volumes". It also do	emonstrates the
5			_	Diesel	Diesel		Gasoline	Gasoline	Gasoline
,	On or Off Road	Subsector	Year	Conservative Scenario	Moderate Scenario	Ambitious Scenario	Conservative Scenario	Moderate Scenario	Ambitious Scenario
8	Off-Road	Agriculture	2042	6,725,068.04	8,463,119.07	10,545,046.09	581,059.76	719,531.85	885,854.60
9	Off-Road	Agriculture	2043	7,520,133.63	9,266,375.25	11,345,477.23	648,972.97	788,477.90	954,959.61
5	Off-Road	Agriculture	2044	8,307,760.23	10,063,335.81	12,141,416.69	715,995.44	856,858.61	1,023,924.83
	Off-Road	Agriculture	2045	9,087,681.38	10,853,256.07	12,931,519.91	782,069.68	924,580.72	1,092,613.13
	Off-Road	СНС	2030	200,855.32	251,069.15	255,128.81	-	-	-
	Off-Road	СНС	2031	327,573.73	410,675.85	433,747.50	-	-	-
	Off-Road	CHC	2032	447,081.88	562,459.63	613,272.56	-	-	-
	Off-Road	CHC	2033		704,146.47	789,756.66	-	-	-
	Off-Road	СНС	2034		837,024.23	963,046.43	-	-	-
	Off-Road	CHC	2035	, ,	2,306,876.03	2,823,390.45	-	-	-
	Off-Road	CHC	2036	, ,	3,740,861.64	4,637,710.64	-	-	-
-	Off-Road	CHC	2037	3,827,319.64	4,905,172.85	6,111,131.39	-	-	-
1	Off-Road	CHC	2038	4,529,332.24	5,807,091.37	7,252,959.53	-	-	-
1	Off-Road Off-Road	CHC	2039		6,496,415.38		-	-	-
1	Off-Road	CHC CHC	2040	, ,	7,021,434.10	8,791,539.06	-	-	-
$\frac{1}{2}$	Off-Road	CHC	2041	5,864,370.48 6,257,481.22	7,464,443.09 7,854,372.76	9,298,286.38 9,683,789.58	<u>-</u>	-	-
$\frac{1}{2}$	Off-Road	CHC	2042		8,205,390.87	9,976,260.46	<u> </u>	-	-
┨	Off-Road	CHC	2043		8,526,294.39	10,196,922.49	-	<u> </u>	<u>-</u>
1	Off-Road	СНС	2045	, ,	8,823,254.70	10,361,794.01	-	_	_
1	Off-Road	CHE	2030		909,814.87	1,302,815.50	2,031,386.75	2,378,601.65	3,407,109.65
	Off-Road	CHE	2031	1,053,692.51	1,214,814.96	1,711,029.20	2,756,831.63	3,180,183.79	4,480,525.32
	Off-Road	CHE	2032		1,547,007.99	2,172,283.45	3,437,636.32	4,054,078.74	5,693,818.62
	Off-Road	CHE	2033		1,901,847.52	2,679,678.15	4,067,918.33	4,988,169.93	7,028,854.77
1	Off-Road	CHE	2034		2,282,412.95	3,236,743.69	4,658,530.77	5,990,374.31	8,494,962.55
1	Off-Road	CHE	2035		2,688,858.92	3,842,988.30	5,213,840.98	7,060,943.93	10,090,855.83
	Off-Road	CHE	2036	2,250,549.88	3,108,490.33	4,410,768.62	5,916,513.23	8,166,497.35	11,587,384.50
5	Off-Road	CHE	2037	2,581,043.64	3,545,613.06	4,942,845.59	6,785,799.28	9,318,348.35	12,991,858.10
	Off-Road	CHE	2038	2,968,282.31	3,994,340.33	5,434,821.37	7,803,388.96	10,500,905.88	14,291,883.71
7	Off-Road	CHE	2039	3,413,803.56	4,460,643.42	5,897,656.60	8,974,160.81	11,729,836.07	15,515,489.12

Δ	В	С	D	E	F	G	Н	I	J
<u>1</u> 2				Tab Contents					
				percentages provided volume of gasoline ar	by the Demand St nd diesel displaced	tudy as represented of by market adoption on the displaced fuel	splaced specifically by an the tab titled, "AL_\of FCEVs, as provided by the emission	Volumes". It also do	emonstrates the
						Market Displaced	volumes (gai)		
				Diesel	Diesel	Diesel	Gasoline	Gasoline	Gasoline
7	On or Off Road	Subsector	Year	Conservative Scenario	Moderate Scenario	Ambitious Scenario	Conservative Scenario	Moderate Scenario	Ambitious Scenario
8	Off-Road	CHE	2040		4,937,630.27	6,326,593.28	10,275,238.74	12,986,931.59	16,649,572.54
	Off-Road	CHE	2041	4,405,721.58	5,419,708.04	6,766,369.78	11,584,056.86	14,258,454.00	17,811,807.91
5	Off-Road	CHE	2042		5,877,513.05	7,188,106.51	12,822,176.41	15,467,061.90	18,926,068.63
1	Off-Road	CHE	2043	5,318,183.20	6,312,648.36	7,593,297.12	13,992,888.74	16,616,522.96	19,996,357.25
2	Off-Road	CHE	2044	5,738,328.11	6,727,809.60	7,983,972.67	15,103,378.78	17,713,456.55	21,028,119.07
	Off-Road	CHE	2045	6,138,331.05	7,125,522.34	8,362,057.07	16,160,600.06	18,764,205.79	22,026,495.84
	Off-Road	C&M	2030	1,173,883.32	3,160,276.92	5,661,337.58	833,724.04	1,925,375.19	3,318,728.98
	Off-Road	C&M	2031	1,794,730.61	4,114,842.63	7,031,562.01	1,232,589.00	2,479,441.77	4,069,845.22
	Off-Road	C&M	2032	2,804,901.29	5,313,158.65	8,452,454.31	1,841,645.98	3,172,723.52	4,860,540.09
	Off-Road	C&M	2033	4,198,833.49	6,754,696.58	9,930,005.07	2,648,763.63	4,001,358.77	5,697,958.33
	Off-Road	C&M	2034	5,953,689.28	8,427,917.25	11,467,613.44	3,630,591.30	4,952,752.18	6,584,355.71
	Off-Road	C&M	2035	8,050,205.18	10,321,448.03	13,064,458.32	4,768,351.16	6,015,401.77	7,518,518.06
	Off-Road	C&M	2036	' '	11,707,284.35	14,175,535.51	5,611,542.28	6,776,283.10	8,150,839.66
	Off-Road	C&M	2037	11,332,434.50	13,336,200.76	15,680,823.77	6,502,247.41	7,639,723.76	8,959,772.55
<u>.</u>	Off-Road	C&M	2038		14,869,676.73	17,161,245.06	7,312,558.50	8,436,023.53	9,724,020.30
3	Off-Road	C&M	2039		16,332,073.70	18,611,654.23	8,083,123.92	9,193,252.23	10,453,827.53
1	Off-Road	C&M	2040	, ,	17,755,011.06	20,042,692.13	8,848,675.46	9,938,367.76	11,164,727.57
	Off-Road	C&M	2041		19,102,226.89	21,417,396.20	9,560,586.73	10,645,885.26	11,858,543.63
	Off-Road	C&M	2042	, ,	20,411,232.43	22,774,823.04	10,219,777.65	11,320,167.10	12,543,382.43
	Off-Road	C&M	2043		21,685,134.48	24,114,448.30	10,835,214.92	11,966,465.79	13,219,837.22
	Off-Road	C&M	2044		22,928,400.87	25,436,781.26	11,417,862.82	12,590,650.05	13,887,509.55
	Off-Road	C&M	2045		24,145,993.52	26,742,749.07	11,978,186.01	13,198,705.61	14,546,855.48
	Off-Road	GSE	2030	,	150,150.75	265,942.01	344,384.45	562,509.35	996,753.25
	Off-Road	GSE	2031	·	204,555.23	349,763.30	504,628.77	776,390.55	1,330,280.26
4	Off-Road	GSE	2032	,	268,608.04	436,029.42	712,748.19	1,032,996.27	1,685,829.75
3	Off-Road	GSE	2033	,	343,952.58	525,578.08	978,157.99	1,340,610.10	2,067,365.23
4	Off-Road	GSE	2034	·	430,300.61	616,839.86	1,301,780.47	1,697,235.87	2,465,285.02
:5	Off-Road	GSE	2035	·	527,787.73	709,072.04	1,686,938.75	2,104,296.65	2,875,668.10
6	Off-Road	GSE	2036		605,037.29	780,064.79	2,020,412.61	2,454,714.99	3,223,990.45
7	Off-Road	GSE	2037	582,136.82	685,600.20	856,978.74	2,366,769.35	2,820,592.57	3,592,247.98

А	В	С	D	K	L	М	N	0	Р		
1				Tab Contents]						
3 4				on the percentag also demonstrate	ges provided by the es the volume of go Demand Study. En	gasoline and diese e Demand Study a gasoline and diese nission reductions	as represented on I displaced by ma	the tab titled, "A rket adoption of F	L_Volumes". It CEVs, as		
5						Angeles Link Disnla	aced Volumnes (gal)				
6	Angeles Link Displaced Volumnes (gal) Diesel Diesel Diesel Gasoline Gasoline Gasoline										
7	On or Off Road	Subsector	Year	Low Scenario	Medium Scenario	High Scenario	Low Scenario	Medium Scenario	High Scenario		
8	On-Road	MDV	2030	1,350,901.06	3,301,400.57	5,062,378.88	1,052,247.69	2,249,347.06	3,323,659.97		
9	On-Road	MDV	2031	1,887,169.71	4,191,136.29	6,252,951.77	1,548,454.56	3,030,948.36	4,335,986.00		
10	On-Road	MDV	2032	2,588,147.73	5,256,395.46	7,516,419.79	2,247,398.23	4,073,799.92	5,561,335.58		
11	On-Road	MDV	2033	3,471,889.47	6,512,566.74	8,847,909.22	3,166,202.87	5,378,690.77	6,954,851.36		
12	On-Road	MDV	2034	4,554,192.38	7,972,706.84	10,241,433.93	4,331,589.49	6,962,946.85	8,495,891.56		
13	On-Road	MDV	2035	5,843,667.26	9,639,964.08	11,681,650.20	5,767,871.07	8,843,034.10	10,166,534.25		
14	On-Road	MDV	2036		11,251,110.36	13,038,919.93	7,189,692.26	10,672,994.56	11,761,638.40		
15	On-Road	MDV	2037	8,367,788.32	12,801,133.91	14,317,611.76	8,556,154.67	12,402,091.33	13,242,574.73		
16	On-Road	MDV	2038		14,310,538.84	15,537,473.65	9,870,001.41	14,036,980.27	14,618,424.30		
17	On-Road	MDV	2039	10,852,257.82	15,788,681.87	16,706,906.74	11,143,735.03	15,594,530.05	15,904,972.34		
18	On-Road	MDV	2040	12,103,285.48	17,249,045.65	17,838,171.72	12,355,410.01	17,048,105.66	17,079,344.57		
19	On-Road	MDV	2041	13,379,068.49	18,748,056.15	19,014,394.79	13,492,970.19	18,411,423.52	18,179,745.87		
20	On-Road On-Road	MDV	2042	14,677,906.08	20,285,238.77	20,236,383.69	14,538,131.99	19,662,580.94	19,187,578.61		
21 22	On-Road On-Road	MDV MDV	2043 2044		21,865,111.19	21,507,558.33	15,519,827.27	20,838,248.30	20,135,350.76		
23	On-Road	MDV	2044	17,339,702.52 18,701,201.21	23,465,842.20 25,106,332.95	22,807,620.23 24,152,846.00	16,405,145.03 17,211,922.41	21,896,104.52 22,858,601.06	20,984,609.76 21,755,086.21		
24	On-Road	HDV	2043		35,511,667.48	58,994,483.10		- 22,030,001.00	- 21,733,000.21		
25	On-Road	HDV	2030	13,636,576.33	42,983,609.61	70,166,437.95	-	-	_		
26	On-Road	HDV	2032	19,307,134.86	53,099,398.96	82,918,284.53	39.58	70.59	91.75		
27	On-Road	HDV	2033	27,385,026.44	66,034,402.98	97,331,594.57	153.08	245.20	290.55		
28	On-Road	HDV	2034	38,049,948.12	81,997,726.66	113,540,306.97	306.37	456.08	501.37		
29	On-Road	HDV	2035	51,476,317.38	101,177,172.10	131,640,808.65	538.44	749.88	761.69		
30	On-Road	HDV	2036		119,194,552.80	148,602,016.03	799.88	1,080.61	1,054.39		
31	On-Road	HDV	2037	75,917,500.00	136,085,085.91	164,549,625.69	1,075.31	1,429.32	1,363.39		
32	On-Road	HDV	2038	87,032,786.70	151,997,435.16	179,633,760.20	1,351.88	1,779.60	1,673.98		
33	On-Road	HDV	2039	97,535,114.77	167,067,523.59	193,985,547.43	1,628.68	2,130.29	1,985.11		
34	On-Road	HDV	2040	107,520,687.43	181,440,815.74	207,747,608.30	1,880.47	2,449.12	2,267.71		
35	On-Road	HDV	2041	118,942,441.15	196,433,543.65	221,039,894.94	2,135.60	2,772.36	2,554.47		
36	On-Road	HDV	2042	131,932,585.92	212,146,273.31	233,884,976.76	2,380.99	3,083.25	2,830.27		
37	On-Road	HDV	2043	146,464,559.48	228,608,575.11	246,360,471.26	2,627.35	3,395.49	3,107.44		

А	В	С	D	K	L	М	N	0	Р
2				Tab Contents	1				
					les the volume of g	gasoline and diese	I fuels displaced s	pecifically by Ange	eles Link based
					_	e Demand Study	•		
				-		gasoline and diese	•		_
					_	nission reductions		· ·	
,				volume by the er	nissions factor.				
3									
5						Angeles Link Displa	ced Volumnes (gal)		
							,,,		
6				Diesel	Diesel	Diesel	Gasoline	Gasoline	Gasoline
$\overline{}$				Diesei	Diesei	Diesei	Gasonne	Gasonne	Gasonne
7	On or Off Road	Subsector	Year	Low Scenario	Medium Scenario	High Scenario	Low Scenario	Medium Scenario	High Scenario
88	On-Road	HDV	2044	162,476,887.04	245,807,361.83	258,507,946.63	2,864.31	3,695.82	3,374.02
39	On-Road	HDV	2045	179,903,180.55	263,716,284.84	270,351,406.83	3,077.59	3,965.97	3,613.60
10	On-Road	Bus	2030	736,822.50	1,764,095.33	2,659,851.62	11,183,556.80	26,799,082.73	40,411,464.72
1	On-Road	Bus	2031	956,696.64	2,058,489.01	3,008,075.17	14,597,087.70	31,434,796.50	45,943,750.64
12	On-Road	Bus	2032	1,208,181.94	2,369,717.88	3,319,029.49	18,443,490.99	36,232,818.29	50,779,950.12
3	On-Road	Bus	2033	1,485,071.84	2,691,210.39	3,589,601.99	22,680,383.65	41,178,618.81	54,980,021.19
4	On-Road	Bus	2034	1,792,254.86	3,031,767.97	3,833,276.45	27,267,645.92	46,256,199.85	58,602,683.42
5	On-Road	Bus	2035	2,129,926.25	3,392,720.41	4,053,931.97	32,168,460.00	51,450,375.87	61,702,131.93
·6 ·7	On-Road	Bus	2036	2,431,238.72	3,711,870.60	4,242,703.79	39,451,964.15	59,752,055.51	67,671,542.60
8	On-Road On-Road	Bus Bus	2037 2038	2,697,776.02	3,992,807.89	4,406,289.03	46,414,014.30	67,700,013.75	73,406,167.46
9	On-Road	Bus	2038	2,929,950.12 3,131,324.73	4,235,608.97 4,444,300.04	4,544,187.50 4,659,242.09	52,922,075.57 59,003,101.32	75,155,505.98 82,148,639.80	78,828,401.89 83,959,011.13
0	On-Road	Bus	2040	3,303,392.82	4,620,280.67	4,751,953.40	64,694,709.73		88,823,631.89
1	On-Road	Bus	2041	3,440,947.86	4,756,470.49	4,815,314.51	70,034,056.74		93,447,830.69
2	On-Road	Bus	2042	3,576,093.71	4,893,448.78	4,885,161.22	75,047,650.47	100,746,286.96	97,846,247.00
3	On-Road	Bus	2043	3,716,915.52	5,040,951.51	4,969,362.70	79,765,774.87	106,260,891.48	102,039,254.29
4	On-Road	Bus	2044	3,840,342.27	5,169,210.80	5,040,715.61	84,206,968.05	111,472,258.44	106,035,027.10
5	On-Road	Bus	2045	3,947,228.03	5,279,186.93	5,099,886.50	88,407,977.33	116,422,339.33	109,863,835.19
6	Off-Road	Agriculture	2030		327,077.65	406,775.32	14,393.10	27,082.82	33,595.67
7	Off-Road	Agriculture	2031	242,856.57	449,767.09	552,265.97	20,417.47	37,461.51	45,803.50
8	Off-Road	Agriculture	2032	317,148.37	583,309.35	710,768.56	26,882.21	48,777.63	59,064.54
9 0	Off-Road	Agriculture	2033	395,230.30	727,218.90	881,686.71	33,738.69	60,981.46	73,318.42
1	Off-Road Off-Road	Agriculture Agriculture	2034 2035		881,068.40 1,044,436.35	1,064,476.01 1,258,600.86	40,940.66 48,446.39	74,023.81 87,859.80	88,506.70 104,576.44
52	Off-Road	Agriculture	2035		1,044,436.35	1,456,515.23	58,007.53	103,245.32	121,071.12
53	Off-Road	Agriculture	2037	805,112.02	1,424,348.77	1,656,932.40	69,790.65	120,225.15	137,892.70
54	Off-Road	Agriculture	2038		1,641,426.67	1,859,133.34	83,847.50	138,793.65	154,972.36
65	Off-Road	Agriculture	2039	1,156,371.50	1,876,457.87	2,062,506.45	100,207.02	158,932.74	172,244.29
66	Off-Road	Agriculture	2040	1,373,079.27	2,129,264.84	2,266,498.34	118,890.55	180,625.40	189,653.20
67	Off-Road	Agriculture	2041	1,590,139.81	2,382,295.08	2,470,604.69	137,542.25	202,335.60	207,137.77

А	В	С	D	K	L	М	N	0	Р			
1 2				Tab Contents]							
				This tab calculate on the percentagalso demonstrate	Les the volume of g ges provided by th es the volume of g Demand Study. En missions factor.	e Demand Study a gasoline and diese	as represented on I displaced by ma	the tab titled, "A rket adoption of F	L_Volumes". It -CEVs, as			
3												
5	Angeles Link Displaced Volumnes (gal)											
6			_	Diesel	Diesel	Diesel	Gasoline	Gasoline	Gasoline			
7	On or Off Road	Subsector	Year	Low Scenario	Medium Scenario	High Scenario	Low Scenario	Medium Scenario	High Scenario			
68	Off-Road	Agriculture	2042	1,805,509.29	2,633,994.86	2,674,366.41	155,999.73	223,941.45	224,664.72			
69	Off-Road	Agriculture	2043	2,018,964.13	2,883,994.02	2,877,366.58	174,232.69	245,399.68	242,190.68			
70	Off-Road	Agriculture	2044	2,230,421.78	3,132,033.78	3,079,227.60	192,226.52	266,681.96	259,681.20			
71	Off-Road	Agriculture	2045	2,439,810.73	3,377,882.38	3,279,608.47	209,965.77	287,759.26	277,101.48			
72	Off-Road	СНС	2030	53,924.53	78,140.79	64,704.12	-	-	-			
73	Off-Road	СНС	2031	87,945.19	127,815.53	110,004.24	-	-	-			
74	Off-Road	СНС	2032	120,030.08	175,055.53	155,534.22	-	-	-			
'5	Off-Road	СНС	2033		219,153.03	200,292.98	-	-	-			
'6	Off-Road	CHC	2034	177,374.60	260,508.86	244,241.61	-	-	-			
77	Off-Road	CHC	2035	484,536.21	717,974.02	716,050.03	-	-	-			
78 70	Off-Road Off-Road	СНС	2036 2037	784,219.45	1,164,276.46	1,176,186.19	-	-	-			
79 30	Off-Road	CHC	2037	1,027,537.73 1,216,010.21	1,526,647.56	1,549,865.63	-	-	-			
31	Off-Road	CHC	2038	· · ·	1,807,353.61 2,021,893.42	1,839,448.70 2,060,889.22	-	-	-			
32	Off-Road	CHC	2039		2,185,296.13	2,229,653.30			-			
83	Off-Road	СНС	2041	1,574,433.94	2,323,174.78	2,358,171.28		_	_			
84	Off-Road	CHC	2042	1,679,974.15	2,444,533.43	2,455,940.10	-	-	-			
35	Off-Road	СНС	2043		2,553,781.56	2,530,114.68	-	-	-			
36	Off-Road	СНС	2044	1,895,255.18	2,653,657.06	2,586,077.56	-	-	-			
37	Off-Road	СНС	2045	2,004,079.07	2,746,080.66	2,627,891.21	-		-			
38	Off-Road	CHE	2030	208,746.80	283,163.65	330,411.64	545,375.54	740,297.34	864,089.12			
39	Off-Road	СНЕ	2031	282,889.57	378,089.49	433,940.16	740,139.00	989,775.48	1,136,321.86			
0	Off-Road	CHE	2032	352,265.99	481,478.65	550,920.49	922,917.70	1,261,759.70	1,444,029.47			
91	Off-Road	CHE	2033	416,343.06	591,916.12	679,602.65	1,092,132.35	1,552,478.92	 			
92	Off-Road	CHE	2034	·	710,360.32	820,882.01	1,250,696.72	1,864,397.16	2,154,437.48			
93	Off-Road	CHE	2035	532,661.18	836,859.38	974,633.85	1,399,783.36	2,197,592.86	2,559,177.62			
94	Off-Road	CHE	2036	·	967,462.17	1,118,630.62	1,588,432.94	2,541,676.65	2,938,717.54			
95	Off-Road	CHE	2037	692,944.40	1,103,508.83	1,253,572.54	1,821,814.08	2,900,169.72	3,294,911.05			
96	Off-Road	CHE	2038	·	1,243,167.19	1,378,344.26			+			
97	Off-Road	CHE	2039	916,519.21	1,388,295.71	1,495,725.54	2,409,333.35	3,650,702.27	3,934,938.04			

А	В	С	D	K	L	М	N	О	Р		
1				Tab Containts]						
2				on the percentag also demonstrate	ges provided by the es the volume of go Demand Study. En	gasoline and diese le Demand Study a gasoline and diese nission reductions	as represented on I displaced by ma	the tab titled, "A rket adoption of F	L_Volumes". It -CEVs, as		
3											
5	Angeles Link Displaced Volumnes (gal)										
6				Diesel	Diesel	Diesel	Gasoline	Gasoline	Gasoline		
7	On or Off Road	Subsector	Year	Low Scenario	Medium Scenario	High Scenario	Low Scenario	Medium Scenario	High Scenario		
98	Off-Road	CHE	2040	1,049,390.80	1,536,749.35	1,604,509.69	2,758,639.60	4,041,950.83	4,222,556.94		
99	Off-Road	CHE	2041	1,182,823.90	1,686,787.46	1,716,042.96	3,110,023.89	4,437,689.50	4,517,315.56		
100	Off-Road	CHE	2042	1,308,816.85	1,829,271.11	1,823,001.10	3,442,427.42	4,813,847.15	4,799,907.16		
101	Off-Road	CHE	2043	1,427,796.58	1,964,699.21	1,925,762.92	3,756,733.83	5,171,596.40	5,071,346.84		
L02	Off-Road	CHE	2044	1,540,594.78	2,093,910.74	2,024,843.53	4,054,872.09	5,512,997.42	5,333,015.61		
.03	Off-Road	CHE	2045	1,647,985.37	2,217,691.74	2,120,730.85	4,338,709.04	5,840,024.38	5,586,217.47		
.04	Off-Road	C&M	2030	315,157.74	983,579.83	1,435,791.83	223,833.65	599,238.69	841,674.59		
.05	Off-Road	C&M	2031	481,839.41	1,280,671.38	1,783,299.29	330,918.72	771,682.03	1,032,167.83		
06	Off-Road	C&M	2032	753,044.48	1,653,625.87	2,143,656.81	494,434.99	987,453.61	1,232,698.75		
.07	Off-Road	C&M	2033	1,127,279.73	2,102,278.84	2,518,383.68	711,125.49	1,245,351.55	1,445,079.35		
.08	Off-Road	C&M	2034	1,598,413.76	2,623,038.93	2,908,341.98	974,721.19	1,541,455.78	1,669,881.72		
09	Off-Road	C&M	2035	2,161,274.82	3,212,366.61	3,313,323.45	1,280,180.70	1,872,186.51	1,906,797.94		
110	Off-Road	C&M	2036	2,585,299.25	3,643,683.45	3,595,107.67	1,506,556.01	2,108,997.25	2,067,163.26		
11	Off-Road	C&M	2037	3,042,469.70	4,150,654.63	3,976,869.14	1,745,687.63	2,377,727.76	2,272,319.59		
12	Off-Road	C&M	2038	3,459,897.02	4,627,921.67	4,352,324.02	1,963,235.50	2,625,561.86	2,466,143.16		
L13	Off-Road	C&M	2039	3,850,136.72	5,083,066.64	4,720,167.42	2,170,112.66	2,861,235.79	2,651,232.15		
14	Off-Road	C&M	2040	4,225,891.44	5,525,930.52	5,083,098.00	2,375,643.73	3,093,139.71	2,831,526.02		
.15	Off-Road	C&M	2041	4,577,459.70	5,945,227.42	5,431,741.56	2,566,773.75	3,313,341.91	3,007,487.17		
.16	Off-Road	C&M	2042	4,914,406.84	6,352,632.05	5,776,003.37	2,743,749.71	3,523,200.11	3,181,171.55		
17	Off-Road	C&M	2043	5,238,332.45	6,749,111.34	6,115,750.47	2,908,978.92	3,724,349.05	3,352,729.65		
18	Off-Road	C&M	2044	5,551,281.08	7,136,055.83	6,451,112.01	3,065,405.03	3,918,615.26	3,522,060.38		
19	Off-Road	C&M	2045	5,855,440.67	7,515,009.82	6,782,323.12	3,215,837.51	4,107,861.71	3,689,279.44		
20	Off-Road	GSE	2030	24,828.31	46,731.74	67,446.49	92,458.44	175,071.00	252,790.12		
21	Off-Road	GSE	2031	35,966.40	63,664.17	88,704.71	135,479.96	241,637.71	337,377.08		
.22	Off-Road	GSE	2032	50,231.11	83,599.46	110,582.96	191,354.71	321,501.66	427,549.24		
L23	Off-Road	GSE	2033	68,119.04	107,049.11	133,293.71	262,610.48	417,240.98	524,311.80		
124	Off-Road	GSE	2034	89,689.69	133,923.39	156,438.94	349,494.86	528,234.39	625,229.65		
125	Off-Road	GSE	2035	115,070.18	164,264.52	179,830.27	452,900.04	654,924.80	729,308.35		
126	Off-Road	GSE	2036	135,394.06	188,307.06	197,834.99	542,429.27	763,986.26	817,647.61		
L27	Off-Road	GSE	2037	156,288.89	213,380.83	217,341.41	635,417.22	877,859.13	911,042.71		

	А	С	D	М	N	0	Р	Q	R			
1												
2	Tab Contents											
	This tab multiplies the volume of diesel and gasoline displaced by											
	FCEVs for the full market in	the geographic region	of this study (as									
	projected by the Demand Study) by the emissions factors (from the											
	"Emissions_Factors" tab) as developed from the EMFAC model data											
	or EPA emissions factors for offroad CH4 and N2O calculations to											
3	estimate the CO2, CH4, and N2O associated emissions reductions.											
5	$\boxed{ \text{Emission Reduction}(\frac{\text{MT}}{\text{year}}) = \text{Emission Factor} \left(\frac{\text{ton}}{\text{gal}}\right) * \text{Fuel Displaced by FCEV} \left(\frac{\text{gal}}{\text{year}}\right) }$											
	Emission Reduction (MT/yr	1	Shown in columns M	1 through R								
	Emission Factor (MT/gal)	•	Shown on Tab "6. En	=	·s"							
	Fuel Displaced by FCEV (gal		Shown on Tab "12. A	_								
9	(Bui	, 1-1		80.00_21	<u>-</u> /							
	Example Calculation: MDV	Year 2030, Ambitious	Diesel Displacement	t								
11	$202,713.44\left(\frac{MT}{}\right)=0.010$	$0155477 \left(\frac{MT}{gal}\right) * 19,9$	960, 996. 51(gal)									
12	$\frac{202,713.44}{\text{year}} = 0.010$	$\left(\frac{133477}{\text{gal}}\right)^* 19,$	900, 990. 31 (_{year})									
	CO2 Emission Reduction (M	IT/yr)	202,713.44	Calculated, sho	own in cell O23							
	CO2 Emission Factor (MT/g				nissions_Factor	s"						
15	Fuel Displaced by FCEV (gal	/yr)	19,960,996.51	Cell G8, "12. A	ngeles_Link_Fu	el_Disp"						
16												
				Conservative	Moderate		Conservative	Moderate				
				CO2	CO2	Ambitious CO2	CO2	CO2	Ambitious CO2			
				Reductions	Reductions	Reductions	Reductions	Reductions	Reductions			
				from Diesel	from Diesel	from Diesel	from Gasoline	from Gasoline	from Gasoline			
17			Year	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)			
		MDV		51099.99122	107724.3982							
		MDV		71385.20993	136756.3934							
	On-Road	MDV	2032		171515.7027							
	On-Road	MDV	2033		212504.4564							
	On-Road	MDV	2034		260148.6943							
	On-Road	MDV	2035		314551.1453							
		MDV	2036		367122.7012				398978.6848			
		MDV	2037									
-	On-Road	MDV	2038		466951.5722							
		MDV	2039									
	On-Road	MDV	2040		562834.7805				579366.0884			
		MDV	2041		611747.3558							
35	On-Road On-Road	MDV MDV	2042 2043		661905.484 713456.5763							
20												

	А	С		D	М	N	0	Р	Q	R
					Conservative CO2 Reductions from Diesel	CO2 Reductions from Diesel	Ambitious CO2 Reductions from Diesel	Reductions from Gasoline	CO2 Reductions from Gasoline	Ambitious CO2 Reductions from Gasoline
17		Subsector	Year		(MT/yr)	(MT/yr)		(MT/yr)	(MT/yr)	(MT/yr)
	On-Road	MDV		2044	655901.9562	765688.2829	913288.2581	525691.9515	605252.6265	
	On-Road	MDV		2045	707402.82	819217.3459		551544.5957	631857.9782	_
_	On-Road	HDV		2030	386247.4863	1158742.459	2362323.125	0	0	
_	On-Road	HDV		2031	515825.2906	1402551.247	2809683.047	0	0	-
	On-Road	HDV		2032	730323.2284	1732628.527	3320306.761		1.951234352	
-	On-Road	HDV		2033	1035882.386	2154696.524	3897460.654		6.777930746	
-	On-Road	HDV		2034	1439300.091	2675578.314	4546508.058		12.60697757	
-	On-Road	HDV		2035	1947173.963	3301401.863	5271308.607		20.72809419	
	On-Road	HDV		2036	2424619.618	3889307.346	5950488.258		29.87014483	
_	On-Road	HDV		2037	2871700.752	4440443.895	6589080.294		39.50916126	
-	On-Road	HDV		2038	3292154.234	4959662.394	7193096.092		49.19172141	56.78488888
	On-Road	HDV		2039	3689421.575	5451398	7767786.42		58.88564418	
	On-Road	HDV		2040	4067141.818	5920397.207	8318862.265		67.69865658	
-	On-Road	HDV		2041	4499187.904	6409608.546	8851126.885	68.43389846	76.63367188	
	On-Road	HDV		2042	4990560.888	6922313.477	9365484.029	76.29717813	85.22723099	
	On-Road	HDV		2043	5540256.01	7459476.878	9865041.744		93.85833454	
_	On-Road	HDV		2044	6145947.887	8020671.714	10351464.55		102.1598466	
_	On-Road	HDV		2045	6805125.286	8605038.232	10825713.64		109.6273418	
	On-Road	Bus		2030	27871.48854	57562.26922	106508.7558		740780.8634	
	On-Road	Bus		2031	36188.57934	67168.30794	120452.7128		868921.3706	
	On-Road	Bus		2032		77323.6776	132904.2939	591009.391	1001548.4	
	On-Road	Bus		2033		87813.94881			1138260.332	
	On-Road	Bus		2034	67794.90399	98926.31122	153496.3462		1278614.944	
	On-Road	Bus		2035	80567.86383	110704.1565	162332.0816		1422192.478	
-	On-Road	Bus			91965.48983	121117.998	169891.0942		1651667.698	
-	On-Road	Bus		2037	102047.6889	130284.956	176441.5572	1487306.19	1871365.343	
	On-Road	Bus		2038	110830.0451	138207.533	181963.4423		2077450.231	2674019.643
	On-Road	Bus		2039	118447.3617	145017.1034	186570.5871		2270754.598	
-	On-Road	Bus		2040	124956.1122	150759.3353	190283.0369		2452403.537	
	On-Road	Bus		2041	130159.3512	155203.1965	192820.2135		2623511.296	
	On-Road	Bus		2042	135271.4589	159672.7858	195617.0934	2404852	2784831.19	
-	On-Road	Bus		2043	140598.269	164485.7862	198988.7835		2937266.015	
-	On-Road	Bus		2044	145267.083	168670.8751	201845.9764		3081318.741	
	On-Road	Bus		2045	149310.2079	172259.3862	204215.3635	2832974.78	3218148.991	
	Off-Road	Agriculture		2030	6553.036336	10698.28223	16327.88094		889.0631328	
	Off-Road	Agriculture		2031	9208.618246	14711.29329	22167.84679	777.0019632	1229.770638	
88	Off-Road	Agriculture		2032	12025.60928	19079.28594	28530.10947	1023.022345	1601.251346	2379.455887

	А	С		D	M	N	0	Р	Q	R
					Conservative CO2 Reductions from Diesel	Moderate CO2 Reductions from Diesel	Ambitious CO2 Reductions from Diesel	CO2 Reductions	Moderate CO2 Reductions from Gasoline	Ambitious CO2 Reductions from Gasoline
17		Subsector	Year		(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
89	Off-Road	Agriculture		2033	14986.31432	23786.37909	35390.73005	1283.951127	2001.873329	2953.683184
90	Off-Road	Agriculture		2034	18076.34086	28818.59525	42727.85643	1558.027481	2430.022026	3565.553702
91	Off-Road	Agriculture		2035	21282.40387	34162.14717	50519.98944	1843.663562	2884.224001	4212.934545
92	Off-Road	Agriculture		2036	25406.12531	40079.4074	58464.23317	2207.519685	3389.293594	4877.434135
93	Off-Road	Agriculture		2037	30528.18048	46588.58549	66508.9387	2655.934973	3946.700132	5555.10289
94	Off-Road	Agriculture		2038	36670.96442	53688.91965	74625.24429	3190.879157	4556.259051	6243.16909
95	Off-Road	Agriculture		2039	43847.21262	61376.48316	82788.60075	3813.452743	5217.376381	6938.980757
96	Off-Road	Agriculture		2040	52064.32235	69645.46835	90976.79475	4524.468333	5929.493887	7640.310589
97	Off-Road	Agriculture		2041	60294.80857	77921.75668	99169.58323	5234.272718	6642.187133	8344.688761
98	Off-Road	Agriculture		2042	68461.17307	86154.52744	107348.5384	5936.685871	7351.454764	9050.773842
99	Off-Road	Agriculture		2043	76554.93842	94331.67303	115496.9251	6630.554903	8055.876383	9756.819519
100	Off-Road	Agriculture		2044	84572.97486	102444.7292	123599.5865	7315.32331	8754.521941	10461.43705
101	Off-Road	Agriculture		2045	92512.56995	110486.1151	131642.8349	7990.403672	9446.438505	11163.22512
107	Off-Road	CHC		2030	1884.354386	2355.442982	2393.529356	0	0	0
108	Off-Road	CHC		2031	3054.890971	3829.885735	4045.047559	0	0	0
109	Off-Road	CHC		2032	4169.249174	5245.201092	5719.055605	0	0	0
110	Off-Road	CHC		2033	5200.814004	6566.257686	7364.583822	0	0	0
111	Off-Road	CHC		2034	6160.660477	7805.072213	8980.202319	0	0	0
112	Off-Road	CHC		2035	16828.48851	21510.2854	26326.4837	0	0	0
113	Off-Road	CHC		2036	27235.72343	34879.96127	43242.22148	0	0	0
114	Off-Road	CHC		2037	35684.64815	45734.19103	56978.14507	0	0	0
115	Off-Road	CHC		2038	42228.20534	54141.10373	67621.32876	0	0	0
116	Off-Road	CHC		2039	47228.07066	60565.2211	75758.56526	0	0	0
117	Off-Road	CHC		2040	51034.71894	65456.65869	81958.29557	0	0	0
118	Off-Road	CHC		2041	54667.21424	69582.96904	86677.91626	0	0	0
119	Off-Road	CHC		2042	58328.578	73213.86648	90266.61945	0	0	0
120	Off-Road	CHC		2043	62042.49718	76481.42606	92987.48092	0	0	0
121	Off-Road	CHC		2044	65795.35659	79467.75069	95038.53101	0	0	0
122	Off-Road	CHC		2045	69568.92047	82230.37508	96569.15019	0	0	0
128	Off-Road	CHE		2030	7915.246233	9261.912706	13262.65796	20732.33317	24276.00843	34772.96108
129	Off-Road	CHE		2031	10726.58669	12366.81271	17418.27229	28136.2236	32456.95574	45728.24147
130	Off-Road	CHE		2032	13357.19694	15748.53685	22113.83923	35084.51623	41375.92766	58111.1128
131	Off-Road	CHE		2033	15786.86654	19360.80224	27279.11572	41517.17449	50909.26228	71736.4918
132	Off-Road	CHE		2034	18060.56834	23234.95715	32950.04132	47544.96502	61137.76021	86699.58779
133	Off-Road	CHE		2035	20197.40888	27372.57592	39121.60967	53212.461	72063.99377	102987.2746

	А	С		D	М	N	0	Р	Q	R
					Conservative CO2 Reductions from Diesel	CO2 Reductions from Diesel		CO2 Reductions from Gasoline	Moderate CO2 Reductions from Gasoline	
17		Subsector	Year		(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
		CHE			22910.59123		44901.61168		83347.272	
		CHE		2037	26275.01674		50318.15372		95103.06325	
		CHE		2038	30217.10527	40662.37289	55326.46566		107172.2454	
-		CHE		2039	34752.51026		60038.12693		119714.7069	158351.082
		CHE		2040	39790.72603	50265.06173	64404.70116		132544.6238	169925.5373
-		CHE		2041	44850.23281		68881.62462	118226.8843	145521.7815	181787.3115
140	Off-Road	CHE		2042	49627.62434	59833.06575	73174.90328		157856.8337	193159.4565
141	Off-Road	CHE		2043	54139.08949	64262.74193	77299.74248	142811.4225	169588.2334	204082.8221
142	Off-Road	CHE		2044	58416.16338	68489.08207	81276.81847	154145.0838	180783.5375	214612.9833
143	Off-Road	CHE		2045	62488.19223	72537.79666	85125.71657	164935.0842	191507.4843	224802.4166
149	Off-Road	C&M		2030	11961.7419	32202.87419	57688.40712	3225.260735	7448.312296	12838.50024
150	Off-Road	C&M		2031	18288.1074	41929.79351	71650.84286	4760.396883	9575.882047	15718.19843
151	Off-Road	C&M		2032	28581.63536	54140.50168	86129.57884	7098.956353	12229.83463	18735.82777
152	Off-Road	C&M		2033	42785.65067	68829.61404	101185.6577	10190.84277	15394.812	21922.30248
153	Off-Road	C&M		2034	60667.43741	85879.54769	116853.7168	13939.96998	19016.52127	25281.20445
154	Off-Road	C&M		2035	82030.70279	105174.417	133125.3892	18271.78394	23050.34123	28810.11337
155	Off-Road	C&M		2036	98124.45409	119295.9348	144447.1417	21460.02567	25914.30342	31170.9722
156	Off-Road	C&M		2037	115476.2556	135894.4124	159785.8618	24815.01355	29156.04969	34193.8507
157	Off-Road	C&M		2038	131319.6149	151520.3621	174871.1901	27850.24266	32129.01509	37034.41486
158	Off-Road	C&M		2039	146131.0742	166422.0244	189650.6979	30724.36764	34944.02217	39735.53339
159	Off-Road	C&M		2040	160392.7592	180921.5976	204232.8145	33571.53998	37705.79138	42358.55412
160	Off-Road	C&M		2041	173736.4538	194649.578	218240.8971	36267.86724	40384.92244	44985.11425
161	Off-Road	C&M		2042	186525.2068	207988.1998	232072.9266	38767.11051	42941.2639	47581.33782
162	Off-Road	C&M		2043	198819.7307	220969.1208	245723.5599	41121.7319	45415.04728	50171.83379
163	Off-Road	C&M		2044	210697.6255	233637.8678	259197.9864	43372.0453	47827.01043	52753.27815
164	Off-Road	C&M		2045	222241.9344	246045.0021	272505.6537	45564.16694	50206.93664	55335.20275
170	Off-Road	GSE		2030	942.3536116	1530.020474	2709.921243	2758.554045	4505.756445	7984.093732
171	Off-Road	GSE		2031	1365.097257	2084.396422	3564.051453	4040.828353	6216.968067	10652.25475
172	Off-Road	GSE		2032	1906.511659	2737.087801	4443.094203	5713.114371	8280.099378	13512.96064
_		GSE		2033		3504.840875	5355.585667		10749.8511	16577.4287
174		GSE		2034				10438.27131	13609.21359	
-		GSE			4367.465303				16872.8446	
-		GSE		2036			7948.778678		19681.16693	25848.98634
		GSE		2037	5931.91336				22615.35543	28802.44586
		GSE		2038	6641.320826		9443.118214	21572.0897	25357.91045	
		GSE		2039	7277.717382		10088.76401		27911.81393	34139.07851
_	Off-Road	GSE		2040				26234.88472	30286.23462	

		А	С	D	М	N	0	Р	Q	R
					Conservative	Moderate		Conservative	Moderate	
					CO2	CO2	Ambitious CO2	CO2	CO2	Ambitious CO2
					Reductions	Reductions	Reductions	Reductions	Reductions	Reductions
					from Diesel	from Diesel	from Diesel	from Gasoline	from Gasoline	from Gasoline
	17		Subsector	Year	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
1	81	Off-Road	GSE	2041	8273.900655	9424.188419	11096.28434	27882.4286	32008.83582	38225.14296
1	.82	Off-Road	GSE	2042	8651.553657	9815.918462	11473.14541	29388.90674	33582.94553	39769.39918
1	.83	Off-Road	GSE	2043	8992.856581	10170.24698	11814.87988	30780.23955	35035.87622	41192.77703
1	.84	Off-Road	GSE	2044	9301.235708	10490.44809	12123.91807	32063.32826	36374.72854	42501.96081
1	.85	Off-Road	GSE	2045	9581.094431	10781.00964	12404.35553	33244.08981	37605.626	43702.80431

	A	С	D	S	Т	U	V	W	Х
1									
16									
				Conservative	Moderate		Conservative	Moderate	
				CH4	CH4	Ambitious CH4	CH4	CH4	Ambitious CH4
				Reductions	Reductions	Reductions	Reductions	Reductions	Reductions
				from Diesel	from Diesel	from Diesel	from Gasoline	from Gasoline	from Gasoline
17		Subsector	Year	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
23	On-Road	MDV	2030	0.183459171	0.386752098	0.72778173	0.737837327	1.360559954	2.467117574
24	On-Road	MDV	2031	0.245584926	0.470479933	0.861403131	1.048432273	1.770268021	3.107852542
25	On-Road	MDV	2032	0.324694662	0.568843356	0.998223366	1.473887533	2.304637256	3.860948693
26	On-Road	MDV	2033	0.4202461	0.679999446	1.133728531	2.055116152	3.011568751	4.778769725
27	On-Road	MDV	2034	0.536671154	0.810440708	1.277580473	2.790115766	3.868891797	5.793146479
28	On-Road	MDV	2035		0.952437079	1.416371314	3.682876399	4.870701007	6.871873325
29	On-Road	MDV	2036	0.793258132	1.08173724	1.53843822	4.555132511	5.833048314	7.888404178
30	On-Road	MDV	2037	0.904960435	1.194224343	1.639155316		6.725238286	8.81246144
31	On-Road	MDV	2038	1.002784154	1.288063156	1.716222621	6.158763524	7.55559334	9.656227619
32	On-Road	MDV	2039	1.099635797	1.380044886	1.792071908	6.882090565	8.307693576	10.3980797
33	On-Road	MDV	2040	1.192189441	1.465634357	1.860042859	7.531707684	8.964601608	11.02143419
34	On-Road	MDV	2041	1.285582936	1.553992932	1.934137505	8.159360987	9.604052525	11.6376961
35	On-Road	MDV	2042	1.375707404	1.640063509	2.007823314		10.15474466	12.16075957
36	On-Road	MDV	2043	1.469113963	1.731433804	2.090053279		10.6636956	12.64496921
37	On-Road	MDV	2044		1.810139319	2.159075726		11.06139905	13.00936641
	On-Road	MDV	2045		1.891686761	2.233296053	9.916658149	11.36067621	13.26866986
44	On-Road	HDV	2030		2.068093454	4.216212976	0	0	0
	On-Road	HDV	2031		2.52727214	5.062798028	0	0	0
	On-Road	HDV	2032		3.149512142	6.035538659		8.15596E-05	0.000130088
	On-Road	HDV	2033		3.945574707	7.136838995			0.000414001
	On-Road	HDV		2.652349858	4.93056994			0.000528429	0.000712881
_	On-Road	HDV	2035		6.116417341				0.0010868
	On-Road	HDV		4.525640642	7.259533521				
	On-Road	HDV	2037						0.001990034
	On-Road	HDV	2038			13.5953081			0.002456008
	On-Road	HDV	2039		10.35916537	14.76094464			0.002925123
	On-Road	HDV		7.767201684	11.30644596				0.003367438
55	On-Road	HDV	2041	8.632104252	12.29742131	16.98169795	0.003002637	0.003362414	0.00380202

	А	С		D	S	Т	U	V	W	X
					CH4 Reductions from Diesel	Moderate CH4 Reductions from Diesel	Ambitious CH4 Reductions from Diesel	CH4 Reductions from Gasoline	Moderate CH4 Reductions from Gasoline	
17		Subsector	Year		(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
56	On-Road	HDV		2042	9.614431631	13.33599793	18.04282282	0.003350007	0.003742102	
57	On-Road	HDV		2043	10.71394597	14.42540419	19.07737189	0.003690434	0.004114155	0.004620536
58	On-Road	HDV		2044	11.92698379	15.56512083	20.08831707	0.004014714	0.004468513	0.005006248
59	On-Road	HDV		2045	13.24826653	16.75234992	21.07557667	0.004298029	0.004777778	0.005342303
65	On-Road	Bus		2030	0.071917657	0.148529689	0.274827809	10.91418709	22.56056373	41.74905558
66	On-Road	Bus		2031	0.089684689	0.166460495	0.298513076	14.442766	26.82954961	48.12172877
67	On-Road	Bus		2032	0.108083161	0.182869349	0.31431668	18.36758814	31.12645719	53.53427085
68	On-Road	Bus		2033	0.126065951	0.197068207	0.322572439	22.73219667	35.60257052	58.33464086
69	On-Road	Bus		2034	0.144020655	0.210154913	0.326081209	27.3735416	40.05639551	62.27754219
70	On-Road	Bus		2035	0.161613023	0.22206414	0.325625842	33.29765629	45.93995009	67.6105055
71	On-Road	Bus		2036	0.175328373	0.230906415	0.32389029	41.03137465	53.60667355	74.50477906
72	On-Road	Bus		2037	0.18460518	0.235686648	0.319184351	49.59154755	62.39730862	83.02744942
73	On-Road	Bus		2038	0.190053646	0.237001126	0.312034661	57.53112854	70.47667384	90.71505415
74	On-Road	Bus		2039	0.191709357	0.234713	0.301968121	66.57663876	79.95874593	100.2870734
75	On-Road	Bus		2040	0.18969773	0.228869986	0.288871504	74.66086091	88.32118857	108.5133995
76	On-Road	Bus		2041	0.186334464	0.222186913	0.276038954	79.65881184	93.12284277	112.5186161
77	On-Road	Bus		2042	0.179868237	0.212314281	0.260108836	84.51644599	97.87048637	116.6484348
78	On-Road	Bus		2043	0.174521074	0.204172045	0.246999742	89.58951749	102.9514898	121.3217043
79	On-Road	Bus		2044	0.170258025	0.197688075	0.236570437	93.6080237	106.8932834	124.7800097
80	On-Road	Bus		2045	0.166661621	0.192277734	0.227947332	96.76162467	109.9174363	127.2908159
86	Off-Road	Agriculture		2030	0.817520484	1.334658382	2.036975908	0.103468582	0.167944831	0.255663187
87	Off-Road	Agriculture		2031	1.148816161	1.835299395	2.765537672	0.146776374	0.232304787	0.348564796
88	Off-Road	Agriculture		2032	1.500248347	2.380225942	3.559258292	0.193249847	0.302477829	0.449481372
89	Off-Road	Agriculture		2033	1.869609494	2.967456788	4.415151282	0.242539531	0.378155685	0.557953429
90	Off-Road	Agriculture		2034	2.255104073	3.595248179	5.330490492	0.294312802	0.459033361	0.673536323
91	Off-Road	Agriculture		2035	2.655074721	4.261880092	6.30259381	0.348269717	0.544832526	0.795827151
92	Off-Road	Agriculture		2036	3.169527347	5.000084674	7.293673615	0.417002468	0.640240629	0.921351725
93	Off-Road	Agriculture		2037	3.808526554	5.812133648	8.297286479	0.501708523	0.745535231	1.04936397
94	Off-Road	Agriculture		2038	4.574866224	6.697931975	9.309831769	0.602759963	0.860681461	1.179340295
95	Off-Road	Agriculture		2039	5.470135165	7.65698978	10.32824687	0.720364679	0.985567126	1.310779753
96	Off-Road	Agriculture		2040	6.495256221	8.68858253	11.34976055	0.854676164	1.120086763	1.443261587
97	Off-Road	Agriculture		2041	7.522046054	9.72108638	12.37184743	0.988758858	1.254715166	1.576319266
98	Off-Road	Agriculture		2042	8.540836416	10.74816122	13.39220853	1.121445338	1.388696464	1.709699377
99	Off-Road	Agriculture		2043	9.550569711	11.76829657	14.40875608	1.252517828	1.521762347	1.843072046
100	Off-Road	Agriculture		2044	10.55085549	12.78043648	15.4195992	1.381871196	1.65373712	1.976174929
101	Off-Road	Agriculture		2045	11.54135535	13.78363521	16.42303028	1.509394489	1.784440787	2.108743334
107	Off-Road	CHC		2030	1.287482592	1.60935324	1.635375704	0	0	0

	А	С		D	S	Т	U	V	W	Х
17		Subsector	Voor		Conservative CH4 Reductions from Diesel (MT/yr)	Moderate CH4 Reductions from Diesel (MT/yr)	Ambitious CH4 Reductions from Diesel (MT/yr)	CH4 Reductions	Moderate CH4 Reductions from Gasoline (MT/yr)	Ambitious CH4 Reductions from Gasoline (MT/yr)
-	Off-Road	CHC	Year		2.099747602	2.632432209		0	0	0
-	Off-Road	CHC		2031	2.86579485	3.605366254		0	0	ő
	Off-Road	CHC		2032	3.574986765	4.513578894		0	0	o
-		CHC		2034	4.2349317	5.365325335		0	0	o
-	Off-Road	CHC		2035	11.56861118	14.78707538		0	0	o
		CHC		2036	18.72373977	23.97892311	29.72772521	0	0	0
-		CHC		2037	24.53311887	31.44215799		0	0	0
-	Off-Road	CHC		2038	29.03301967	37.22345567	46.49147062	0	0	0
-	Off-Road	CHC		2039	32.47197564	41.64202257		0	0	0
		CHC		2040	35.09100031	45.00739258		0	0	0
-		CHC		2041	37.5906148	47.84708024		0	0	0
-		CHC		2042	40.11045461	50.34652942		0	0	0
	Off-Road	CHC		2043	42.66685146	52.59655548		0	0	0
121	Off-Road	CHC		2044	45.25042658	54.65354707	65.36227317	0	0	0
122	Off-Road	CHC		2045	47.84866648	56.55706262	66.41909962	0	0	0
128	Off-Road	CHE		2030	0.318787022	0.373024096	0.534154354	5.565999694	6.517368518	9.335480438
129	Off-Road	CHE		2031	0.43201393	0.498074132	0.701521973	7.553718661	8.713703579	12.27663939
130	Off-Road	CHE		2032	0.537961917	0.634273277	0.890636216	9.419123504	11.10817576	15.60106301
131	Off-Road	CHE		2033	0.635817008	0.779757485	1.09866804	11.14609623	13.6675856	19.25906208
132	Off-Road	CHE		2034	0.727390485	0.935789309	1.327064913	12.7643743	16.41362561	23.27619739
133	Off-Road	CHE		2035	0.813451868	1.102432156	1.575625202	14.28592427	19.34698637	27.64894498
134	Off-Road	CHE		2036	0.922725452	1.274481034	1.808415134	16.21124624	22.37620275	31.74943354
135	Off-Road	CHE		2037	1.058227893	1.453701357	2.026566693	18.59309003	25.53227448	35.59769118
136	Off-Road	CHE		2038	1.216995748	1.637679535	2.228276761	21.38128574	28.77248212	39.15976136
137	Off-Road	CHE		2039	1.399659459	1.828863804	2.418039204	24.58920061	32.13975082	42.5124402
138	Off-Road	CHE		2040	1.602573904	2.02442841	2.593903246	28.15415415	35.58419256	45.61982875
139	Off-Road	CHE		2041	1.806345847	2.222080296	2.77421161	31.7403158	39.06816395	48.80435368
140	Off-Road	CHE		2042	1.998755581	2.409780352	2.947123668	35.13276336	42.3797496	51.85742805
141	Off-Road	CHE		2043	2.180455113	2.588185829	3.113251817	38.34051515	45.52927292	54.79001887
142	Off-Road	CHE		2044	2.352714524	2.758401935	3.273428794	41.38325786	48.53487094	57.61704626
143	Off-Road	CHE		2045	2.516715733	2.92146416	3.428443399	44.28004415	51.41392386	60.35259861
149	Off-Road	C&M		2030	1.185622153	3.191879692	5.717950953	2.376113508	5.487319295	9.45837759
150	Off-Road	C&M		2031	1.81267792	4.15599106	7.101877626	3.51287865	7.066409046	11.59905887
151	Off-Road	C&M		2032	2.832950305	5.366290236	8.536978854	5.248691049	9.042262042	13.85253925
152	Off-Road	C&M		2033	4.240821823	6.822243549	10.02930512	7.548976336	11.40387248	16.23918123
153	Off-Road	C&M		2034	6.013226169	8.51219642	11.58228958	10.34718521	14.1153437	18.76541377
154	Off-Road	C&M		2035	8.130707227	10.42466252	13.1951029	13.58980081	17.14389503	21.42777647

	А	С	D	S	Т	U	V	W	Х
				CH4 Reductions from Diesel	Moderate CH4 Reductions from Diesel	Ambitious CH4 Reductions from Diesel	Reductions from Gasoline	Moderate CH4 Reductions from Gasoline	
17			Year	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
	Off-Road	C&M	2036	9.72588543	11.82435719	14.31729087	15.99289549	19.31240683	23.22989303
	Off-Road	C&M	2037			15.83763201			25.53535176
157	Off-Road	C&M	2038	13.01611873	15.0183735	17.33285751	20.84079172	24.04266706	27.71345787
_	Off-Road	C&M	2039		16.49539443	18.79777078		26.20076886	29.79340846
	Off-Road	C&M	2040	15.89778669	17.93256117	20.24311905	25.21872505	28.32434812	31.81947359
	Off-Road	C&M	2041	17.2203851	19.29324916	21.63157017	27.24767217	30.340773	33.79684935
161	Off-Road	C&M	2042	18.48797887	20.61534476	23.00257127	29.1263663	32.26247624	35.74863992
	Off-Road	C&M	2043	19.70658573	21.90198582	24.35559278	30.88036252	34.10442749	37.67653609
163	Off-Road	C&M	2044	20.88389721	23.15768488	25.69114907	32.54090904	35.88335263	39.57940221
164	Off-Road	C&M	2045	22.02814439	24.38745346	27.01017656	34.13783012	37.616311	41.4585381
170	Off-Road	GSE	2030	0.173860939	0.282283416	0.499970973	0.354715983	0.579384634	1.026655852
171	Off-Road	GSE	2031	0.25185566	0.384563835	0.657555003	0.519767632	0.799682265	1.370188671
172	Off-Road	GSE	2032	0.35174472	0.504983108	0.81973531	0.734130632	1.063986155	1.736404647
173	Off-Road	GSE	2033	0.477005445	0.646630859	0.988086788	1.007502733	1.380828403	2.129386184
174	Off-Road	GSE	2034	0.62805447	0.808965147	1.159658937	1.340833882	1.748152941	2.539243567
175	Off-Road	GSE	2035	0.805782043	0.992240935	1.333055437	1.737546907	2.167425553	2.961938141
176	Off-Road	GSE	2036	0.948100623	1.137470102	1.466521811	2.081024985	2.528356438	3.320710163
177	Off-Road	GSE	2037	1.094417228	1.28892837	1.611120038	2.437772427	2.905210352	3.700015423
178	Off-Road	GSE	2038	1.225300419	1.424908159	1.742222219	2.771327927	3.257685573	4.05509547
179	Off-Road	GSE	2039	1.342713354	1.54731974	1.861341605	3.082002514	3.58607088	4.386141137
180	Off-Road	GSE	2040	1.448530846	1.657955949	1.969811582	3.37111565	3.89170376	4.694358587
181	Off-Road	GSE	2041	1.526505676	1.738729738	2.047225575	3.582820416	4.113053138	4.911832629
182	Off-Road	GSE	2042	1.596181332	1.811002558	2.116755122	3.776398767	4.315321941	5.110265289
183	Off-Road	GSE	2043	1.659150525	1.876374928	2.179803934	3.955180982	4.502019261	5.293165053
184	Off-Road	GSE	2044	1.716045394	1.93545091	2.236820398	4.120054586	4.674058349	5.461391817
185	Off-Road	GSE	2045	1.767678347	1.989058498	2.288560127	4.271779342	4.832225433	5.615697036

	А	С	D	Υ	Z	AA	AB	AC	AD
1									
16									
				Conservative	Moderate	Ambitious	Conservative	Moderate	Ambitious
				N2O	N2O	N2O	N2O	N2O	N2O
				Reductions	Reductions	Reductions	Reductions	Reductions	Reductions
				from Diesel	from Diesel	from Diesel	from Gasoline	from Gasoline	from Gasoline
17		Subsector	Year	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
23	On-Road	MDV	2030	8.050824427	16.97202281	31.93758526	1.036178525	1.910696241	3.464685448
24	On-Road	MDV	2031	11.24676889	21.54602547	39.44868314	1.493906606	2.522447238	4.428365631
25	On-Road	MDV	2032	15.42431463	27.02236881	47.41966247	2.134022061	3.336853484	5.590216014
26	On-Road	MDV	2033	20.69105833	33.48016365	55.81977598	2.980423396	4.36751468	6.930390323
27	On-Road	MDV	2034	27.14114628	40.98653272	64.61125825	4.04123077	5.60374045	8.390849618
28	On-Road	MDV	2035	34.82589554	49.55766104	73.69730873	5.340831366	7.063390105	9.96544891
29	On-Road	MDV	2036	42.41539558	57.84033108	82.26006524	6.613666891	8.469092484	11.45329525
30	On-Road	MDV	2037	49.86863707	65.80877794	90.32708873	7.816451014	9.773373155	12.80660557
31	On-Road	MDV	2038	57.27454883	73.56841035	98.02296531	8.973423559	11.00862844	14.06928843
32	On-Road	MDV	2039	64.67507138	81.16732989	105.4006962	10.0499616	12.13177895	15.1843834
33	On-Road	MDV	2040	72.13069073	88.67484888	112.5376317	11.03784758	13.13777835	16.152102
34	On-Road	MDV	2041	79.73384194	96.38104503	119.9581993	11.98199663	14.10352173	17.0899211
35	On-Road	MDV	2042	87.47438914	104.2834786	127.6674948	12.85152446	14.99357286	17.95547212
36	On-Road	MDV	2043			135.6870938		15.84021556	18.78326665
37	On-Road	MDV	2044	103.3376203	120.6345008	143.888937	14.4171749	16.59913747	19.5223281
38	On-Road	MDV	2045			152.3757104		17.25599199	20.15408736
44	On-Road	HDV	2030					0	0
45	On-Road	HDV	2031			442.6667082		0	0
46	On-Road	HDV	2032		272.97633		8.2514E-05	0.000126945	0.000202477
	On-Road	HDV	2033	163.2036917	339.4733148	614.0465132	0.000318671		
48	On-Road	HDV	2034						
49	On-Road	HDV	2035	306.7780508	520.137208	830.4968177	0.001120627	0.001346261	0.001678142
	On-Road	HDV	2036						0.002313569
51	On-Road	HDV	2037						
52	On-Road	HDV	2038						
53	On-Road	HDV	2039		858.869975			0.003712201	0.004245116
54	On-Road	HDV	2040	640.7798497	932.760991	1310.640138	0.003774604	0.004240674	0.004818641
55	On-Road	HDV	2041	708.8488865	1009.836437	1394.498645	0.004258893	0.004769195	0.005392726

	А	С		D	Υ	Z	AA	AB	AC	AD
					Conservative N2O Reductions from Diesel	Moderate N2O Reductions from Diesel	N2O Reductions	N2O Reductions	Moderate N2O Reductions from Gasoline	Ambitious N2O Reductions from Gasoline
17		Subsector	Year		(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)	(MT/yr)
56	On-Road	HDV		2042	786.2649002	1090.613307	1475.535823	0.004657842	0.00520301	0.005861188
57	On-Road	HDV		2043	872.8695905	1175.24362	1554.241344	0.005146768	0.005737699	0.006443911
58	On-Road	HDV		2044	968.2965924	1263.660095	1630.877455	0.005661561	0.006301509	0.007059825
59	On-Road	HDV		2045	1072.15026	1355.727278	1705.595593	0.006167165	0.006855548	0.007665575
65	On-Road	Bus		2030	4.391164369	9.068958957	16.78049786	7.914473248	16.35989713	30.27452073
66	On-Road	Bus		2031	5.701525413	10.58239427	18.97737396	10.24157104	19.02521569	34.12380314
67	On-Road	Bus		2032	7.200276142	12.1823769	20.93912563	12.76410589	21.6305697	37.20233145
68	On-Road	Bus		2033	8.850428063	13.8351234	22.64611607	15.27240988	23.91924801	39.19157301
69	On-Road	Bus		2034	10.68111473	15.58588062	24.18341185	17.85076431	26.12147474	40.61227238
70	On-Road	Bus		2035	12.69349976	17.44148494	25.57548557	20.63717155	28.47259347	41.90353785
71	On-Road	Bus		2036	14.48920037	19.0821899	26.76641107	25.09675896	32.7884156	45.5707004
72	On-Road	Bus		2037	16.07765495	20.52644788	27.7984392	29.82647149	37.52840229	49.93624872
73	On-Road	Bus		2038	17.46131874	21.7746531	28.66841444	34.03731743	41.69632996	53.67002476
74	On-Road	Bus		2039	18.66143008	22.84750369	29.39427197	37.91505035	45.53609095	57.11296796
75	On-Road	Bus		2040	19.68688636	23.75219467	29.97916995	41.12902637	48.65420047	59.77764539
76	On-Road	Bus		2041	20.50665879	24.45232682	30.37890316	43.40593745	50.7424627	61.31118328
77	On-Road	Bus		2042	21.31207344	25.15651243	30.81955273	45.96166304	53.22384611	63.43565434
78	On-Road	Bus		2043	22.15131453	25.9148026	31.35076388	49.75026883	57.17035251	67.37158066
79	On-Road	Bus		2044	22.88688808	26.57416505	31.80091578	53.07045404	60.60244477	70.74320669
80	On-Road	Bus		2045	23.52388406	27.13953644	32.17421368	55.92154785	63.52469993	73.56531554
	Off-Road	Agriculture		2030	0.688777101	1.12447596	1.7161923	0.064332797	0.104421656	0.158961567
	Off-Road	Agriculture		2031	0.967900231	1.546275868	2.330019928	0.091259922	0.14443821	0.216724226
88	Off-Road	Agriculture		2032	1.263988764	2.005387211	2.998745175	0.120155345	0.188069116	0.279470283
89	Off-Road	Agriculture		2033	1.575182802	2.500140758	3.719851867	0.150801781	0.235122706	0.346914049
_	Off-Road	Agriculture		2034	1.899969574	3.029067363	4.491043171			0.418779061
	Off-Road	Agriculture		2035	2.236952718	3.590717873	5.310059351		0.338755975	0.494814809
	Off-Road	Agriculture		2036	2.670389182	4.212669765	6.145063597		0.398077075	0.572861176
	Off-Road	Agriculture		2037	3.208758593	4.89683701	6.990627191			0.652454282
	Off-Road	Agriculture		2038	3.854414851	5.643139538				0.733268577
	Off-Road	Agriculture		2039	4.608696556	6.451164617	8.701751296		0.612787851	0.814992593
	Off-Road	Agriculture		2040	5.472381226	7.320301817	9.562396688		0.696427003	0.897364717
_	Off-Road	Agriculture		2041	6.337471872	8.190206635	10.423525		0.780133782	0.98009488
98	Off-Road	Agriculture		2042	7.195822807	9.055537405	11.28319931	0.697271713	0.863438216	1.063025519
99	Off-Road	Agriculture		2043	8.046542984	9.91502152	12.13966063	0.778767562	0.94617348	1.145951531
-	Off-Road	Agriculture		2044	8.889303441	10.76776931	12.99131586	0.859194526	1.028230334	1.2287098
101	Off-Road	Agriculture		2045	9.723819078	11.612984	13.8367263	0.93848362	1.109496863	1.311135752
107	Off-Road	CHC		2030	0.034145404	0.042681755	0.043371899	0	0	0

	А	С		D	Υ	Z	AA	AB	AC	AD
					Conservative N2O Reductions from Diesel	Moderate N2O Reductions from Diesel	N2O Reductions	N2O Reductions	Moderate N2O Reductions from Gasoline	Ambitious N2O Reductions from Gasoline
17		Subsector	Year		(MT/yr)	(MT/yr)		(MT/yr)	(MT/yr)	(MT/yr)
	Off-Road	CHC			0.055687534		0.073737074	0	0	0
	Off-Road	CHC		2032	0.07600392		0.104256336	0	0	0
110	Off-Road	CHC		2033	0.094812442	0.1197049	0.134258632	0	0	0
	Off-Road	CHC		2034	0.112314881	0.14229412	0.163717894	0	0	0
112	Off-Road	CHC		2035	0.306811841	0.392168926	0.479976376	0	0	0
113	Off-Road	CHC		2036	0.496573442	0.635946479	0.788410809	0	0	0
114	Off-Road	CHC		2037	0.650644338	0.833879385	1.038892336	0	0	0
115	Off-Road	CHC		2038	0.769986481	0.987205533	1.233003121	0	0	0
116	Off-Road	CHC		2039	0.861191242	1.104390614	1.381437183	0	0	0
117	Off-Road	CHC		2040	0.930650554	1.193643797	1.494561639	0	0	0
118	Off-Road	CHC		2041	0.996942982	1.268955326	1.580708685	0	0	0
119	Off-Road	CHC		2042	1.063771807	1.33524337	1.646244229	0	0	0
120	Off-Road	CHC		2043	1.131570163	1.394916448	1.695964279	0	0	0
121	Off-Road	CHC		2044	1.200089317	1.449470047	1.733476823	0	0	0
122	Off-Road	CHC		2045	1.268997395	1.499953299	1.761504982	0	0	0
128	Off-Road	CHE		2030	0.466517593	0.545888921	0.781689298	3.128335595	3.663046539	5.246948859
129	Off-Road	CHE		2031	0.632215507	0.728888974	1.026617522	4.245520708	4.897483033	6.900009
130	Off-Road	CHE		2032	0.787261342	0.928204795	1.303370073	5.293959926	6.243281267	8.768480669
131	Off-Road	CHE		2033	0.930463913	1.141108514	1.607806888	6.264594231	7.681781689	10.82443635
132	Off-Road	CHE		2034	1.064473881	1.369447769	1.942046214	7.174137383	9.225176437	13.08224233
133	Off-Road	CHE		2035	1.190417367	1.61331535	2.305792979	8.029315102	10.87385365	15.53991798
134	Off-Road	CHE		2036	1.350329929	1.865094195	2.646461172	9.111430368	12.57640592	17.84457214
135	Off-Road	CHE		2037	1.548626185	2.127367839	2.965707356	10.45013089	14.35025646	20.00746147
136	Off-Road	CHE		2038	1.780969387	2.396604197	3.26089282	12.01721899	16.17139506	22.00950091
137	Off-Road	CHE		2039	2.048282135	2.676386055	3.538593957	13.82020764	18.06394754	23.89385325
138	Off-Road	CHE		2040	2.345230104	2.962578161	3.79595597	15.82386766	19.99987465	25.64034171
139	Off-Road	CHE		2041	2.643432947	3.251824824	4.059821868	17.83944756	21.95801915	27.43018418
140	Off-Road	CHE		2042	2.925008167	3.526507833	4.312863905	19.74615167	23.81927532	29.14614569
141	Off-Road	CHE		2043	3.190909922	3.787589019	4.555978269	21.54904866	25.58944536	30.79439017
142	Off-Road	CHE		2044	3.442996864	4.036685759	4.790383601	23.25920332	27.27872308	32.38330337
143	Off-Road	CHE		2045	3.682998633	4.275313405	5.017234242	24.88732409	28.89687691	33.9208036
149	Off-Road	C&M		2030	1.103450321	2.970660307	5.321657323	1.225574336	2.830301531	4.878531599
150	Off-Road	C&M		2031	1.687046777	3.867952076	6.609668286	1.81190583	3.644779403	5.98267247
	Off-Road	C&M			2.636607215		7.945307052		4.66390358	
	Off-Road	C&M			3.946903479				5.881997387	8.37599874
	Off-Road	C&M		2034	5.59646792		10.77955664		7.280545699	9.67900289
_	Off-Road	C&M			7.567192865			7.009476208		11.05222155

	А	С	D	Υ	Z	AA	AB	AC	AD
17		Subsector	Year	Conservative N2O Reductions from Diesel (MT/yr)	Moderate N2O Reductions from Diesel (MT/yr)	Ambitious N2O Reductions from Diesel (MT/yr)	Conservative N2O Reductions from Gasoline (MT/yr)	Moderate N2O Reductions from Gasoline (MT/yr)	Ambitious N2O Reductions from Gasoline (MT/yr)
_	Off-Road	C&M	2030						
-	Off-Road	C&M	203						
-	Off-Road	C&M	203			16.13157036			14.29430985
	Off-Road	C&M	2039						15.36712647
-	Off-Road	C&M	2040						16.41214953
$\overline{}$	Off-Road	C&M	204:						
-	Off-Road	C&M	2042						
162	Off-Road	C&M	2043	3 18.34078276	20.38402641	22.6675814	15.92776593	17.59070471	19.43316072
163	Off-Road	C&M	204		21.55269682	23.91057438	16.78425834	18.50825557	20.41463903
164	Off-Road	C&M	204	5 20.50144131	22.69723391	25.13818412	17.60793343	19.40209725	21.38387755
170	Off-Road	GSE	2030	0.107275899	0.174174874	0.308492728	0.368491361	0.601885008	1.066525983
171	Off-Road	GSE	203:	0.155400301	0.237284069	0.405725428	0.539952783	0.830737887	1.423399882
172	Off-Road	GSE	2032	0.217033976	0.311585322	0.505794128	0.76264056	1.105306006	1.803837837
173	Off-Road	GSE	2033	0.294322509	0.398984998	0.609670571	1.046629053	1.434452807	2.212080793
174	Off-Road	GSE	2034	0.387522971	0.499148707	0.715534238	1.392905101	1.816042376	2.637854967
175	Off-Road	GSE	203	0.497184665	0.612233768	0.822523567	1.805024457	2.25159742	3.076964865
176	Off-Road	GSE	2030	0.584998257	0.701843254	0.90487516	2.161841489	2.626545038	3.449669781
177	Off-Road	GSE	203	0.675278715	0.795296228	0.994095343	2.532443201	3.018034055	3.843705342
178	Off-Road	GSE	2038	0.756036429	0.879198651	1.074988178	2.878952312	3.384197634	4.212574906
179	Off-Road	GSE	2039	0.828482708	0.954729201	1.148487374	3.201691932	3.725335768	4.556476715
180	Off-Road	GSE	2040	0.893774352	1.022994096	1.215415657	3.502032762	4.042837886	4.876663775
181	Off-Road	GSE	204:	0.941886481	1.072833243	1.263181738	3.721959073	4.272783357	5.10258341
182	Off-Road	GSE	2042			1.306082948	3.923055029	4.482907259	5.308722193
	Off-Road	GSE	2043			1.344985406	4.108780243	4.67685496	5.498724861
	Off-Road	GSE	204	1.05883652	1.194214392	1.380165777	4.280056706	4.855575178	5.673484703
185	Off-Road	GSE	204!	1.090695151	1.227291414	1.412090291	4.437673685	5.019884674	5.833782358

Appendix C.3: Power Generation

GHG Results, Calculations, and Data

	A	C	D	E	<u>F</u>
1		7			
2	Tab Contents				1
	This workbook contains select tabs (including this one) from a propri				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservativ	/e", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
97	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT97
98	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT98
99	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT99
100	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT100
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT101
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT102
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT104
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT105
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT106
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT107
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT108
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT109
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT110
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT111
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT112
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT114
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT115
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT116
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT117 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT118
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT119
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT120
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT121
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT121 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT122
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT124
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT125
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT126
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT127
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT128
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT129
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT130
131	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT131
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT132
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT134
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT135
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT136
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT137
138		_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT138
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT139

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1					
2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
140	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT140
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT141
_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT142
_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_ 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT144
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_ 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT145
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT146
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT147
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT148
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT149
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT150
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT151
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT152
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT154
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT155
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT156
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT157
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT158
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT159 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT159
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT160
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT161
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT162
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT164
	1-SoCal_PowerPeakerBaseload (LowConservative_EcGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT165
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT166 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT166
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT167 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT167
-	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT168
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_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Bland % H2 (sef/100-sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT170
_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT170
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT171
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT172
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT174
_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT175
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT176
_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT177
_	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT178
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT179
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT180
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT181
182	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT182

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3 Power GHK Call* to produce the results in *2. Calculations**.		This workbook contains select tabs (including this one) from a proprie	etary Stantec ca	lculation tool. This data is copied from		
4 In the workbook, the terms "Low", "Moff", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenarios.			er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
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1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No CO2 & FMT CO2/MMRts) 0.00 AP2, GH6, Industriew 3, DataPrep, SocialSas.xbx, Data_Prep, Power, Cell AT138 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 0.00 AP2, GH6, Industriew 3, DataPrep, SocialSas.xbx, Data_Prep, Power, Cell AT138 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 No RNO EF FMT ROS/MMRts) 1.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2038, H2-M6 OZ Percent (spf.100-scf) 2.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2039, H2-M6 No RNO EF FMT ROS/MMRts) 2.56cl PowerPeakmetsacked (LowConcrevative_ECGeneral 2039, H2-M6 Spc.10 PowerPeakmetsacked (LowConcrevative_ECGeneral 2004, H2-M6 Epige_Ros/Colf (LowConcrevative_ECGeneral 2004, H2-	4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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1872 SoCal PowerPeakerBaseload (LowConservative, ECGeneral) 2039 12-NC			_			
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1991 -55Cal PowerPeakerBaseload (LowConservative ECGeneral) 2039 H2-NG			_			
1901 -56Cal PowerPeakerBaseload (LowConservative_ECGeneral) 2039 H2-NG 204 Percent (ssf/100-ssf) 3.00 APL_GHG_IndustPow_3_DataPrep_SocialGas.xisx, Data_Prep_Power, Cell AT194 1951 -56Cal PowerPeakerBaseload (LowConservative_ECGeneral) 2039 H2-NG NG V20 EF (MT COZ/MM8tu) 0.00 APL_GHG_IndustPow_3_DataPrep_SocialGas.xisx, Data_Prep_Power, Cell AT195 195Cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2039 H2-NG NG V20 EF (MT NOZ/MM8tu) 0.00 APL_GHG_IndustPow_3_DataPrep_SocialGas.xisx, Data_Prep_Power, Cell AT195 195Cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RPL 1000-R-120 2040 H2-NG		_ :		* * *		
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1956 1-90cal PowerPeakerBaseload (LowConservative_ECGeneral) 2039 H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xlsx, Data_Prep_Power, Cell AT195 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 5.67 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xlsx, Data_Prep_Power, Cell AT197 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 5.67 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xlsx, Data_Prep_Power, Cell AT198 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 26473483.68 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xlsx, Data_Prep_Power, Cell AT199 2040 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 2040 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 2515251060 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xlsx, Data_Prep_Power, Cell AT200 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041 H2-NG RW N2O EF (MT N2O/MMBtu) 205 1-90cal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041 H2-NG RW N2O EF (MT N2O/MMBtu) 205 205 205 205 205 205 205 205 20			_			
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1981 1-SoCal PowerPeakerBaseload (LowConservative EGeneral) 2040 12-MG PRJ 100%+H2 Demand (MMBtu/yr) 26473483.68 ALP1_GHG IndustPow_3 DataPrep_SoCalGas.xis, Data Prep_Power, Cell AT198 2040 12-MG Blend #12 Demand (MMBtu/yr) 26558 ALP1_GHG IndustPow_3 DataPrep_SoCalGas.xis, Data Prep_Power, Cell AT199 2040 12-MG Blend #12 Demand (MMBtu/yr) 251525106.00 ALP1_GHG IndustPow_3 DataPrep_SoCalGas.xis, Data Prep_Power, Cell AT200 2040 12-MG Blend #12 Demand (MMBtu/yr) 251525106.00 ALP1_GHG IndustPow_3 DataPrep_SoCalGas.xis, Data Prep_Power, Cell AT201 2040 12-MG Blend #12 Demand (MMBtu/yr) 251525106.00 ALP1_GHG IndustPow_3 DataPrep_SoCalGas.xis, Data Prep_Power, Cell AT201 2040 12-MG Alpha 2040		_ :	_			
1-50cal PowerPeakerBaseload (LowConservative ECGeneral) 2040 H2-NG 20			_			
1-Socal PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG Blt M6 % H2 (scf/100-scf) 25152106.00 ALP1_GHG IndustPow_3_DataPrep_SocalGas.xlss, Data Prep_Power, Cell A7202 2502 1-Socal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG 20			_			
1-Socal PowerPeakerBaseload (LowConservative ECGeneral) 2040 H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 AlP1_GHG_IndustPow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell AT201 2040 H2-NG 20			_			
202 1-SoCal PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG			_			
1-Socal PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG IndustPow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell AT205 NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG IndustPow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell AT205 NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG IndustPow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell AT206 1-Socal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041 H2-NG Region			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2040_H2-NG			_			
1-SoCal PowerPeakerBaseload (LowConservative_ECGeneral) 2040 H2-NG 2041			_			
1-SoCal PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG PRJ 100%-H2 Demand (MMBtu/yr) 31830315.93 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT208 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG PRJ Blend-H2 Demand (MMBtu/yr) 1032752.32 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT210 2041_H2-NG Blend H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT210 2041_H2-NG Blend H2-NG Blend H2-NG OPErcent (scf/100-scf) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT211 2050al_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG OPErcent (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2041_H2-NG OPErcent (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2050al_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG NG COPERCENT (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2050al_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG NG COPERCENT (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT218 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT220 3.00 ALP1_GHG_IndustPow_			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG Blend-H2 Demand (MMBtu/yr) 2658 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT210 2041_H2-NG Blend #H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT210 2041_H2-NG Blend #H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT211 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT211 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT218 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT218 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT220 2050_ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2050_ALP			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT210 2041_H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT211 2041_H2-NG D2 Percent (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2041_H2-NG D2 Percent (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2041_H2-NG NG CO2 EF (MT NO2/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2041_H2-NG NG N	—		_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT211 2041_H2-NG O2 Percent (scf/100-scf) 3.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT212 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2041_H2-NG NG CO2 EF (MT N20/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2041_H2-NG NG N20 EF (MT N20/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2041_H2-NG NG N20 EF (MT N20/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2042_H2-NG Equip. Throughput Fraction (MMBtu/100-MMBtu) 5.67 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 2042_H2-NG PRJ 100%-H2 Demand (MMBtu/yr) 37680174.73 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT218 2042_H2-NG PRJ Blend-H2 Demand (MMBtu/yr) 841458.78 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT220 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, C			_			
212 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG 2041		_ · · · · · · · · · · · · · · · · · · ·	_			
214 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT214 2D41_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2D41_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2D41_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2D41_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT217 2D42_H2-NG PRJ 100%-H2 Demand (MMBtu/yr) 37680174.73 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT218 2D42_H2-NG PRJ Blend-H2 Demand (MMBtu/yr) 841458.78 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2D42_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2D42_H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT215 2041_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT216 2042_H2-NG Paulon PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG PRJ 100%-H2 Demand (MMBtu/yr) 37680174.73 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT218 2042_H2-NG PRJ Blend-H2 Demand (MMBtu/yr) 841458.78 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT219 2042_H2-NG Blend % H2 (scf/100-scf) 26.58 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2042_H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221 2042_H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221			_	t en		
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2041_H2-NG 2042_H2-NG		_ · · · · · · · · · · · · · · · · · · ·	_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG 218 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG 219 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG 219 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG 2042_			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG 220 1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG 2042_			_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG	_		_			
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG BSL NG Consumption (MMBtu/yr) 251525106.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT221			_			
			_	BSL NG Consumption (MMBtu/yr)		
222 1-Social_PowerPeakerBaseload (LowConservative_EcGeneral)		1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT222
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT224	224	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT224
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT225	225	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT225
1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral) 2042_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT226	226	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT226

	A	C	D	E	F
1					
2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
227	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT227
228	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT228
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT229
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_ 2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT230
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_ 2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT231
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT232
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT234
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT235
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT236
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT237
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT238
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT239
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT240
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT241
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT242
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT244
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT245
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT246
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT247
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT248
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT249
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT250
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT251
-	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT252
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2045 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT254
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT255
	1-SoCal_PowerPeakerBaseload (LowConservative_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT256
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT397
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT398
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT399
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT400
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT401
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT402
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT404
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT405
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT405 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT406
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2030_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT400 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT407
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2031_H2-NG 2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT407 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT408
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT409 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT409
403	12 30Cai_r owerr caker baseroad (LowConservative_ECOveris)	2031_112-110	The blend-riz beniulia (wiwibla)	00,333,03	ALI 1_GITG_ITIGUSTI OW_5_Datar Tep_50CalGas.AlsA, Data_Flep_F0Wel, Cell A1409

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1						
2	Tab Contents					
	This workbook contains select tabs (including this one) from a proprietary Stantec calculation tool. This data is copied from					
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ		
3	Power GHG Calc" to produce the results in "4. Calculations".					
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.			
5						
6	Equipment ID	Fuel Type	Parameter Change	Value	Reference	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT410	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT411	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT412	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT414	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT415	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT416	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT417	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens) 2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT418 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT419	
		_				
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens) 2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT420 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT421	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT421 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT422	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT422 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT424	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT425	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT426	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT427	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT428	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT429	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT430	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT431	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT432	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT434	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT435	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT436	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT437	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT438	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT439	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT440	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT441	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT442	
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT444	
445	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT445	
446	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT446	
447	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT447	
448	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	7701066.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT448	
449	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	1352212.64	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT449	
450	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT450	
451	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT451	
452	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT452	
432	2-30Cal_rowerreakerbaseroad (Lowconservative_Lcoveris)	2033_112-110	Oz Fertent (St.J/100-St.J)	0.00	ALF1_GIIG_IIIdustrow_3_DataFlep_30CalGas.xisx, Data_Flep_Fower, Cell A1432	

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1					
2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
454	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT454
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT455
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT456
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT457
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT458
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT459
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT460
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2036 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT461
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT462
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT464
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT465
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT466
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT467
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT468
-	2-SoCal_PowerPeakerBaseload (LowConservative_EcOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT469 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT469
	2-SoCal_PowerPeakerBaseload (LowConservative_EcOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT470 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT470
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT470 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT471
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT471 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT472
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT472 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT474
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT474 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT475
	-	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT473 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT476
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2038_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT477
-	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT478
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT479
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT480
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT481
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT482
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT484
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT485
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT486
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT487
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT488
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT489
_	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT490
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT491
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT492
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT494
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT495
496	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT496

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT497
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT498
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT499
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT500
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT501
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT502
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT504
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT505
-	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT506 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT507
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens) 2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT507 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT508
_	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT509 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT509
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT510
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT511
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT512
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT514
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT515
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT516
-	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT517
_	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT518
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT519
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT520
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT521
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT522
524	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT524
525	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT525
526	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT526
527	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT527
528	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	44023060.08	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT528
529	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	605568.88	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT529
530	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT530
531	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT531
532	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT532
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT534
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT535
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT536
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT537
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT538
539	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	325082.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT539

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
540	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT540
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2044 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT541
-	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT542
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT544
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_ 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT545
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT546
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT547
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT548
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT549
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT550
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT551
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT552
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT554
	2-SoCal_PowerPeakerBaseload (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT555
	2-SoCal_PowerPeakerBaseload (LowConservative_EcOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT556
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT697
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT698
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT699 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT699
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT700
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT700 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT701
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT701 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT702
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_			
		2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT704
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT705
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT706
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT707
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT708
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT709
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT710
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT711
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT712
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT714
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT715
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT716
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT717
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT718
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT719
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT720
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT721
722	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT722

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po				
3	Power GHG Calc" to produce the results in "4. Calculations".	·			
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	The same state of the same sta		,		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	• • • • • • • • • • • • • • • • • • • •	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT724
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT725
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT726
_	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT727
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		
	-		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT728
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT729
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT730
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT731
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)		02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT732
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT734
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT735
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT736
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT737
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT738
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)	1291586.88	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT739
740	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT740
741	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT741
742	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT742
744	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT744
745	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT745
746	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT746
747	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT747
748	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	7701066.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT748
749	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	1352212.64	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT749
750	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT750
751	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT751
752	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT752
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT754
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT755
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT756
757	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT757
758	3-SoCal PowerPeakerBaseload (LowConservative ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT758
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT759
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT760
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT761
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT762
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT764
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CO2 EF (MT CO2/MINBLU) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT764 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT765
		_	NG N2O EF (MT N2O/MMBtu)		
700	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2030_02-110	ING INZO EF (IVIT INZO) IVIIVIDLU)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT766

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		· · · · · · · · ·		
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
767	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT767
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT768
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT769
_	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT770
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT771
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT772
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT774
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT775
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT776
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT777
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT778
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT779
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT780
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT781
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT782
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT784
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT785
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT786
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT787
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT788
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT789
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT790
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT791
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT792
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT794
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT795
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT796
_	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT797 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT797
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT798 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT798
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT799 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT799
	3-SoCal PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG 2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT800
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT801
_	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG 2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT802 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT802
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG 2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT804
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG 2040_H2-NG	NG CO2 EF (NIT CO2/MINISTU) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT805
	-	_	NG N2O EF (MT N2O/MMBtu)		
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2040_H2-NG			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT806
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT807
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT808
809	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	1032/52.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT809

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
810	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT810
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT811
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT812
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT814
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT815
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT816
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT817
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT818
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT819
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT820
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT821
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT822
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT824
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT825
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT826
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT827
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT828
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT829
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT830
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT831
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT832
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT834
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT835
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT836
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT837
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT838
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT839
	3-SoCal PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT840
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT841 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT841
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT842 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT842
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT844 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT844
	3-SoCal PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT845 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT845
_	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT846 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT846
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2044_H2-NG 2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT847 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT847
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	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT848
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Pland % H3 (scf/100 scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT849
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT850
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT851
852	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT852

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
854	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT854
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT855
	3-SoCal_PowerPeakerBaseload (LowConservative_ICEngines)	_ 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT856
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_ 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT997
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT998
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT999
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1000
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2030 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1001
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1002
-	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1004
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1005
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2030 H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1006
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1007
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1008
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1009
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1010
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1011
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1012
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1014
	4-SoCal_PowerPeakerBaseload (LowConservative_IcTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1015
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1016
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1017
	4-SoCal_PowerPeakerBaseload (LowConservative_IcTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1018
	4-SoCal_PowerPeakerBaseload (LowConservative_IcTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1019
	4-SoCal_PowerPeakerBaseload (LowConservative_IcTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1020
	4-SoCal_PowerPeakerBaseload (LowConservative_IcTurbines)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1021
	4-SoCal_PowerPeakerBaseload (LowConservative_IcTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1022
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1022 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1024
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1024 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1025
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1025 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1026
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2032_H2-NG 2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1026 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1027
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2033_H2-NG 2033_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1027 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1028
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2033_H2-NG 2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1028 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1029
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines) 4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2033_H2-NG 2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1029 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1030
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	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (ccf/100-ccf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1031
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1032
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1034
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1035
1036	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	ZU33_HZ-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1036

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie	etary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1037
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1038
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1039
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1040
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1041
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1042
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1044
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1045
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1046
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1047
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1048
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1049
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1050
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1051
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1052
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1054
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1055
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines) 4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1056
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1057 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1058
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1059 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1059
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1060
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1061
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1062
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1064
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1065
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1066
	4-SoCal PowerPeakerBaseload (LowConservative ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1067
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1068
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1069
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1070
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2037 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1071
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1072
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1074
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_ 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1075
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_ 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1076
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1077
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_ 2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1078
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1079
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1080
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1081
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1082
_	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1084
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1085
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1086
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2038_H2-NG 2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1087
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1087 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1088
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG 2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1089
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1099 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1090
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1090 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1091
	4-SoCal PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG 2039 H2-NG			
	· · · · · · · · · · · · · · · · · · ·	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1092
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1094
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1095
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1096
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1097
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1098
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1099
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1100
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1101
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1102
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1104
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1105
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1106
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1107
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1108
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1109
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1110
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1111
1112	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1112
1114	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1114
1115	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1115
1116	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1116
1117	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	94.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1117
1118	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	37680174.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1118
1119	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	841458.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1119
1120	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1120
_	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_ 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1121
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1122
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1124
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1125
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1126
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1127
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1128
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1129
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1130
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1131
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1132
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1134
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1135
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1136
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1137
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1138
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1139
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1140
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1141
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1142
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1144
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1145
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1146
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1147
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	• • • • • • • • • • • • • • • • • • • •		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1148
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr) Bland % H3 (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1149
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1150
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)		BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1151
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines) 4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1152 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1154
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2045_H2-NG 2045_H2-NG	NG CO2 EF (NT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1154 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1155
	4-SoCal_PowerPeakerBaseload (LowConservative_ICTurbines)	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell AT1155 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xisx, Data_Prep_Power, Cell AT1156
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1136 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1297
	5-SoCal PowerPeakerBaseload (MidModerate ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1297 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1298
_	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1299 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1299
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1300
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1301
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1301 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1302
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1304
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1305
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1306
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2	Tab Contents				
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	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1307
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1308
_	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1309
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1310
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1311
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1312
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1314
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1315
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1316
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1317
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1318
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1319
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1320
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1321
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1322
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1324
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1325
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1326
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1327
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1328
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1329
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1330
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1331
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1332
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1334
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1335
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1336
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1337
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1338
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr) Bland % H2 (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1339
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral) 5-SoCal PowerPeakerBaseload (MidModerate ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MAMPtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1340
		_	BSL NG Consumption (MMBtu/yr) O3 Parcent (ccf/100 ccf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1341
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1342
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1344
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2034_H2-NG 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1345
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1346
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1347
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1348
1549	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	3141698.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1349

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	ver GHG Calc" to produce the results in "4. Calculations".				
4 In th	nis workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	ipment ID	Fuel Type	Parameter	Value	Reference
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1350
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1351
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1352
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1354
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1355
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1356
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1357
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1358
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1359
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMPtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1360
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral) oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1361
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1362 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1364
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1365 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1365
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1366 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1366
	Cal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1367
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1368
	oCal_PowerPeakerBaseload (MidModerate_EcGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1369
	oCal_PowerPeakerBaseload (MidModerate_EcGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1370
	oCal_PowerPeakerBaseload (MidModerate_EcGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1371
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1372
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1374
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1375
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1376
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1377
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1378
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1379
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1380
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1381
	DCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1382
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1384
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1385
	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1386
1387 5-So	Cal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1387
1388 5-So	Cal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	50719412.44	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1388
1389 5-So	Cal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	3007887.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1389
1390 5-So	Cal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1390
1391 5-So	Cal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1391
1392 5-So	oCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1392

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5	, , , , , , , , , , , , , , , , , , , ,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1394	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1394
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2039 H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1395
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1396
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1397
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_ 2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1398
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1399
	5-SoCal PowerPeakerBaseload (MidModerate ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1400
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1401
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1402
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1404
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1405
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1406
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1407
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1408
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1409
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1410
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1411
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1412
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1414
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1415
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1416
_	75-SoCal_PowerPeakerBaseload (MidModerate_EcGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1417
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1418
	5-SoCal_PowerPeakerBaseload (MidModerate_EcGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1419
	5-SoCal_PowerPeakerBaseload (MidModerate_EcGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1420
	5-SoCal PowerPeakerBaseload (MidModerate ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1421
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1421 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1422
	5-SoCal PowerPeakerBaseload (MidModerate ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1422 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1424
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1425
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1425 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1426
	75-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2042_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1427 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1427
	3-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1427 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1428
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1429 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1429
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1429 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1430
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	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1431
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1432
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1434
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1435
1430	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1436

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a property	orietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Page 1.00 Data_Prep_Page 2.00 ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ		
3	Power GHG Calc" to produce the results in "4. Calculations".	·	, ·		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	I was treating to the terms of the part of		,		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	7 5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1437
	3 5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1438
	5-SoCal_PowerPeakerBaseload (MidModerate_EcGeneral)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1439
_	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1440
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	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1441
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1442
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1444
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1445
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1446
	7 5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1447
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1448
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1449
	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1450
145	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1451
1452	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1452
1454	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1454
145	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1455
1450	5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1456
159	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1597
1598	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1598
1599	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	1569681.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1599
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1600
160	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2030 H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1601
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1602
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1604
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1605
_	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1606
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1607
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1608
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1609
_	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1610 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1610
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1611 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1611
_	2 6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG 2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1612 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1612
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	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1614
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1615
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1616
	76-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1617
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1618
1619	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	2458935.11	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1619

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a	proprietary Stantec ca	culation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Properties of the control of t	ep_Power" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1620
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1621
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1622
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1624
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1625
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1626
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1627
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1628
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1629
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1630
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1631
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1632
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1634
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1635
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1636
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1637
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1638
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1639
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1640
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1641
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1642
1644	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1644
1645	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1645
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1646
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1647
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1648
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1649
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1650
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1651
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1652
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1654
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1655
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	NG N20 EF (MT N20/MMBtu) Fauin Throughout Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1656
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1657
_	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1658
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens) 6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1659
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1660 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1661
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1661 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1662
1002	10-30-cal_rowerreakerbaseroau (wildiviouerate_ecoveris)	2030_02-110	02 FEILEIIL (30)/100-30)	0.00	ALI I_GITG_ITIQUSTFOW_3_DataFTep_30CalGas.xisx, Data_FTep_F0Wei, Cell A11002

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie	tary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1664
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1665
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1666
		2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1667
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1668
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1669
		2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1670
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1671
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1672
	-	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1674
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1675
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1676
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1677
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1678
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Pland % H2 (set/100 set)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1679
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens) 6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG 2038_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1680 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1681
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1682
	-		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1684
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1685
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1686
	-	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1687
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1688
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1689
	4	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1690
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1691
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1692
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1694
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1695
1696	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1696
1697	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1697
1698	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1698
1699	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	2740478.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1699
1700	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1700
1701	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1701
1702	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1702
1704	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1704
1705	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1705
1706	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1706

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2	Tab Contents				
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3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			•		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1707	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1707
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1708
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1709
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1710
	G-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1711
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1712
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1714
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1715
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1716
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1717
_	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1718
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1719
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1720
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1721
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1722
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1724
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1725
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1726
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1727
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1728
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1729
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1730
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1731
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1732
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1734
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1735
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1735 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1736
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1737
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1738
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1739
_	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1739 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1740
	6-SoCal PowerPeakerBaseload (MidModerate ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1740 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1741
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1741 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1742
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1742 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1744
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1744 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1745
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1745 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1746
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1746 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1747
_		2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRI 100%-H2 Demand (MMBtu/ur)		
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1748
1/45	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1749

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5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
175	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1750
_	L 6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2045 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1751
	2 6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	_ 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1752
_	4 6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1754
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1755
	6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1756
	7 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1897
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1898
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1899
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1900
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1901
	7-SoCal PowerPeakerBaseload (MidModerate ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1902
-	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1904
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1905
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1905 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1906
	7 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1907
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1907 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1908
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1909 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1909
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1909 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1910
_	7-5oCal_PowerPeakerBaseload (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1910 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1911
	-	_			
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1912 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1914
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1915
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1916
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1917
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1918
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1919
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1920
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1921
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1922
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1924
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1925
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1926
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1927
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2033_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1928
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1929
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1930
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1931
193	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1932

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1934
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1935
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1936
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1937
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1938
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1939
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1940
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1941
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1942
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1944
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1945
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1946
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1947
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1948
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1949
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1950
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1951
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1952
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1954
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1955
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1956
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1957
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1958
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1959
-	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1960
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT1961
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1962
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2036_H2-NG 2036_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1964 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1965
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2036_H2-NG 2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xlsx, Data_Prep_Power, Cell AT1965 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, Data_Prep_Power, Cell AT1966
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1966 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1967
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2037_H2-NG 2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1967 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1968
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1969 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1969
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1970 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1970
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2037_H2-NG 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1971
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1972
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1974
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1975
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1976
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1977
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1978
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1979
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1980
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1981
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1982
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1984
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1985
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1986
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1987
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1988
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1989
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1990
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1991
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1992
-	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1994
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1995
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1996
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1997
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1998
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	, , , ,		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT1999 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2000
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines) 7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2000 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2001
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2001 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2002
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2002 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2004
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CO2 ET (NT CO2/MINISTR) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2004 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2005
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2006 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2006
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2040_H2-NG 2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2007 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2007
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2008 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2008
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2009 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2009
_	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2009 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2010
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2010 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2011
-	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2011 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2012
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2014
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2015
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2016
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2017
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2018
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2019

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2020
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_ 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2021
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_ 2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2022
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2024
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2025
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2026
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2027
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2028
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2029
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2030
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2030 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2031
	7-SoCal PowerPeakerBaseload (MidModerate ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2032
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2032 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2034
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2035
	- - · · · · · · · · · · · · · · · · · ·	_	NG N2O EF (MT N2O/MMBtu)		
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2043_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2036
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2037
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2038
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2039
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2040
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2041
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2044
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2044
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2045
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2046
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2047
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2048
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2049
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2050
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2051
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2052
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2054
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2055
	7-SoCal_PowerPeakerBaseload (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2056
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2197
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2198
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2199
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2200
2201	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2201
2202	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2202

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po				
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2204
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2030 H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2205
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_ 2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2206
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2207
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2208
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2209
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2210
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2211
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2211 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2212
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2212 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2214
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (NT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2214 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2215
	8-SoCal PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2216
	4	2031_H2-NG			
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2217
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2218
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2219
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2220
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2221
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2222
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2224
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2225
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2226
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2227
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2228
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2229
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2230
_	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2231
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2232
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2234
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2235
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2236
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2237
2238	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	12395930.52	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2238
2239	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	3001032.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2239
2240	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2240
2241	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2241
2242	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2242
2244	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2244
2245	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2245
2246	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2246
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow				
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservativ	/e", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2247
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2248
_	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2249
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2250
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2251
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2252
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2254
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2255
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2256
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2257
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2258
_	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	• • • • • • • • • • • • • • • • • • • •		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2259
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2260
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2261
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines) 8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2262 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2264
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2265
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2266
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2267
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2268
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2269
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2270
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2271
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2272
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2274
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2275
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2276
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_ 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2277
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2278
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2279
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_ 2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2280
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2281
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2282
2284	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2284
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2285
2286	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2286
2287	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	94.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2287
2288	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	50719412.44	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2288
2289	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	3007887.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2289

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2290
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2291
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2292
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2294
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2295
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2296
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2297
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2298
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines) 8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2299 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2300
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2301
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2301 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2302
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2304
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2305
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2306
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2307
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2308
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2309
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2310
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2311
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2312
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2314
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2315
2316	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2316
2317	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	94.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2317
2318	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	87550777.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2318
2319	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	1955149.39	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2319
2320	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2320
2321	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2321
2322	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	-	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2322
2324	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2324
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2325
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2326
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2327
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2328
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2329
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2330
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2331
2332	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2332

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro	prietary Stantec ca	Iculation tool. This data is copied from		
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3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2334
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2335
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2336
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2337
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2338
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2339
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2340
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2341
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2342
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2344
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2345
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2346
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2347
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2348
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2349
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2350
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2351
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2352
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2354
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2355
	8-SoCal_PowerPeakerBaseload (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2356
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2497
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2498
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2499
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2500
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2501
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2502
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2504
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2505
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2506
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2507
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2508
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2509
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2510
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2511
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2512
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2514
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2515
2516	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2516

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2517
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2518
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2519
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2520
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2521
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2522
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2524
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2525
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2526
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2527
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2528
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2529
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2530
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2531
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2532
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2534
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2535
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2536
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2537
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2538
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2539 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2540
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral) 9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2540 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2541
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2541 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2542
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2544
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2545
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2546
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2547
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2548 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2548
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2549
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2550
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2551
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2551 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2552
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2554
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2555
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2556
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2557
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2558
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2559
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
2560	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2560
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2036 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2561
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_ 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2562
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2564
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2565
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2566
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2567
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2568
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2569
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2570
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2571
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2572
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2572 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2574
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 ET (NT CO2/MINISTR) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2575
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		
		2037_H2-NG 2038_H2-NG			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2576
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral) 9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2577
		2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2578
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2579
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2038_H2-NG 2038 H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2580
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2581
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2582
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2584
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2585
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2586
-	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2587
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2588
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2589
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2590
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2591
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2592
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2594
-	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2595
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2596
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2597
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2598
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2599
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2600
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2601
2602	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2602

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po				
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	to the "Conservativ	/e", "Moderate", and "Ambitious" market scenarios.		
5	, , , , , , , , , , , , , , , , , , , ,		,		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	• • • • • • • • • • • • • • • • • • • •	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2604
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2605
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2606
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2607
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2608
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2609
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2609 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2610
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2610 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2611
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		
		_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2612
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2614
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2615
\vdash	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2616
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2617
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2618
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2619
-	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2620
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2621
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2622
_	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2624
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2625
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2626
2627	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2627
2628	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	166305107.91	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2628
2629	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	2287646.48	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2629
2630	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2630
2631	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2631
2632	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2632
2634	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2634
2635	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2635
2636	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2636
2637	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2637
2638	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	192129007.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2638
_	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2639
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_ 2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2640
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2641
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2642
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2644
_	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2645
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2646
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a propr	etary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pov	ver" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2647
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2648
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2649
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2650
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2651
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2652
_	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2654
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2655
	9-SoCal_PowerPeakerBaseload (HighAmbitious_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2656
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2797
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2798
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2799
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2800
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2801
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2802
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2804
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2805
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens) 10-SoCal PowerPeakerBaseload (HighAmbitious ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2806
		2031_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2807
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2808 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2809
_	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens) 10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2810
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2811
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2812
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2031_H2-NG 2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2814
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 ET (INT CO2/MIMBLU) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2815
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2816
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2031_H2-NG 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2817
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2818
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2819
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2820
	10-SoCal PowerPeakerBaseload (HighAmbitious ECOvens)	2032_112 NG 2032 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2821
_	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2822
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2824
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2825
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2826
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2827
_	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2828
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2829
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pe	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		•		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2830
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2831
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2832
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2834
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2835
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2836
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2837
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2838
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2839
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2840
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2841
	10-SoCal PowerPeakerBaseload (HighAmbitious ECOvens)	2034_H2-NG			ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2842
-	- · · · · · · · · · · · · · · · · · · ·	2034_H2-NG	O2 Percent (scf/100-scf)		
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2844
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2845
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2846
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2847
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2848
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2849
_	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2850
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2851
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2852
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2854
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2855
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2856
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2857
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2858
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2859
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2860
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2861
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2862
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2864
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2865
2866	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2866
2867	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2867
2868	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	52413541.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2868
2869	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	5303524.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2869
2870	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2870
2871	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2871
2872	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2872

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pr	oprietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_	Power" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	·	·		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservativ	/e", "Moderate", and "Ambitious" market scenarios.		
5	, , , , , , , , , , , , , , , , , , , ,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2874	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	• • • • • • • • • • • • • • • • • • • •	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2874
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2875
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2876
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2877
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2878
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2879
2880	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2880
2881	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2881
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2882
2884			NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2884
2885		_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2885
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2886
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2887
2888		_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2888
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2889
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2890
2891	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2890 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2891
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2891 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2892
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2894
2895	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2895
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2896
2007	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2897
2007		-			
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens) 10-SoCal PowerPeakerBaseload (HighAmbitious ECOvens)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2898
		-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2000
2001	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	Blend % H2 (scf/100-scf) BSL NG Consumption (MMPtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2001
2002	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr) O3 Percent (sef/100 sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2901
2004	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2004
2904	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2005
2905	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2005
2906	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2007
2907	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2008
-	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2008
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2010
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2011
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2013
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	-	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2912
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2914
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2915
2916	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2916

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie				
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3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2917
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2918
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2919
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2920
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2921
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2922
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2924
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2925
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2926
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2927
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2928
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2929
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2930
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2931
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2932
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2934
2935		2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2935
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2936
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2937
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2938
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2939
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2940
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2941
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2942
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT2944
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens) 10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	2044_H2-NG 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2945
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2946 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2947
_	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2947 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2948
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2949 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2949
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2949 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2950
2950	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2950 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2951
2951	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2951 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2952
	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Frep_Fower, Cell AT2932 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2954
2955	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Frep_Fower, Cell AT2954 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2955
2955	10-SoCal_PowerPeakerBaseload (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2956 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT2956
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Frep_Fower, Cell AT3097
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines) 11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3097 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3098
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines) 11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3099
2033	TT-20Cal_rowerreakerbaseroau (HighAnnullous_ICENgines)	2030_FIZ-NG	רוט טופווע-ווצ טפווועווע (ועוועוסנע/פון)	2552054.10	ALT 1_0110_1110051F0W_3_DataF1eh_30Caldas.xisx, Data_F1eh_F0Wei, Cell A13099

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3100	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3100
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3101
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3102
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3104
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3105
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3106
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3107
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3108
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3109
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3110
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3111
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3112
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3114
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3115
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3116
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3117
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3118 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3118
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3119
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3120
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3121 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3121
		2032_H2-NG 2032_H2-NG	O2 Percent (scf/100-scf)		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3122
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3124
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3125
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3126
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3127
-	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3128
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3129
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3130
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3131
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3132
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3134
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3135
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3136
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3137
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3138
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3139
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3140
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3141
3142	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3142

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po				
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3144	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3144
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3145
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3146
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3147
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_ 2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3148
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3149
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3150
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2035 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3151
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3152
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3154
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3155
	11-SoCal PowerPeakerBaseload (HighAmbitious ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3156
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3157
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3158
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3159
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3160
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3161
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3162
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3164
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3165
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3166
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3167
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3168
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3169
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3170
	11-SoCal PowerPeakerBaseload (HighAmbitious ICEngines)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3171
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3171 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3172
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, Data Prep Power, Cell AT3174
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3175 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3175
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3176 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3176
	11-30Cal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2037_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3177 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3177
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3178 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3178
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3179 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3180
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	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (ccf/100-ccf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3181
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3182
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3184
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3185
2186	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3186

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2	Tab Contents						
	This workbook contains select tabs (including this one) from a proprie	his workbook contains select tabs (including this one) from a proprietary Stantec calculation tool. This data is copied from					
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Power	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ			
3	Power GHG Calc" to produce the results in "4. Calculations".						
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservativ	e", "Moderate", and "Ambitious" market scenarios.				
5							
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3187		
3188	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	82461736.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3188		
3189	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	-	PRJ Blend-H2 Demand (MMBtu/yr)	4890348.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3189		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3190		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3191		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3192		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3194		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3195		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3196		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3197		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3198		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3199		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3200		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3201		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3202		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3204		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3205		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3206		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3207		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3208		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3209		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3210		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3211		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3212		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3214		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3215		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3216		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3217		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3218		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr) Rland % H2 (sef/100 sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3219		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMPtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3220		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	BSL NG Consumption (MMBtu/yr) O3 Percent (scf/100 scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3221		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3222		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3224		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3225		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3226		
_	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3227		
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3228		
3225	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	228/646.48	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3229		

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3230
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3231
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3232
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3234
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3235
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3236
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3237
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3238
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3239
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3240
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3241
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3242
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3244
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3245
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3246
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3247
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3248
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3249
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3250
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3251
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3252
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3254
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3255
	11-SoCal_PowerPeakerBaseload (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3256
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3397
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3398
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3399
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3400
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3401
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3402
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3404
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3405
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3406
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3407
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3408
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3409
_	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3410
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3411
3412	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3412

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po				
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	/e", "Moderate", and "Ambitious" market scenarios.		
5	, , , , , , , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3414
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3415
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3416
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3417
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3418
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3419
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3420
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3421
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3421 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3422
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3424 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3424
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3425
	12-SoCal PowerPeakerBaseload (HighAmbitious ICTurbines)	-	NG N20 EF (MT N20/MMBtu)		
-	· · · · · · · · · · · · · · · · · · ·	_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3426
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3427
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3428
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3429
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3430
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3431
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3432
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3434
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3435
_	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3436
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3437
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3438
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3439
_	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3440
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3441
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3442
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3444
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3445
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3446
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3447
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3448
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3449
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3450
3451	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3451
3452	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3452
3454	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3454
3455	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3455
3456	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3456
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	·	, , , , , , , , , , , , , , , , , , ,		
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	, , , , , , , , , , , , , , , , , , , ,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3457
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3458
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3459
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3460
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3461 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3462
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	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3464
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3465
_	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3466
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3467
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3468
_	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3469
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3470
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3471
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3472
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3474
3475	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3475
3476	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3476
3477	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	94.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3477
3478	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	66596785.41	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3478
3479	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	5172995.29	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3479
3480	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3480
3481	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3481
3482	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3482
3484	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3484
3485	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3485
3486	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3486
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_ 2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3487
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3488
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3489
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3490
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3491
_	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3492
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3494
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3495
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3496
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3497 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3497
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	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3498
3499	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	4455584./6	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3499

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3500
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3501
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3502
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3504
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3505
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3506
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3507
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3508
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3509
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3510
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3511
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3512
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3514
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3515
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines) 12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3516 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3517
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3517 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3518
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3519
	12-SoCal PowerPeakerBaseload (HighAmbitious ICTurbines)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3520
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3521
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3522
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3524
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3525
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3526
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3527
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3528
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3529
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3530
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3531
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3532
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_ 2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3534
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_ 2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3535
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_ 2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3536
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3537
3538	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3538
3539	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	1228058.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3539
3540	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	26.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3540
3541	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	251525106.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3541
3542	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3542
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3544
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3545
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3546
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3547
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3548
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3549
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3550
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3551
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3552
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3554
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3555
	12-SoCal_PowerPeakerBaseload (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3556
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3697
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3698
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3699
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3700
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3701
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3702
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3704
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3705
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3706
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3707
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3708
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3709
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3710
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3711
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3712
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3714
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3715
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3716
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3717
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3718
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3719
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3720
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3721
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3722
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3724
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3725
3/26	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3726

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	·			
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	I was not not some some some years and angle contesponal				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3727
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3728
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3729
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3729 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3730
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	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3731
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3732
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3734
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3735
_	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3736
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3737
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3738
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3739
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3740
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3741
3742	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3742
3744	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3744
3745	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3745
3746	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3746
3747	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3747
3748	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	2238011.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3748
3749	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	206739.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3749
3750	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3750
3751	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3751
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3752
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_ 2035 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3754
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3755
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2035_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3756
	13-SoCal PowerCogeneration (LowConservative ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3757
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3758
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3759
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3760
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3760 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3761
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_			
	-	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3764
_	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3764
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3765
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3766
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3767
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3768
3769	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	214643.31	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3769

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1					
2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3770
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3771
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3772
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3774
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3775
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3776
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3777
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3778 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3778
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3779 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3779
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3779 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3780
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3780 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3781
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG			
		2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3782
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3784
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3785
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3786
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3787
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3788
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3789
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3790
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3791
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3792
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3794
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3795
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3796
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3797
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3798
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3799
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3800
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3801
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3802
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3804
	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3805
3806	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3806
3807	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3807
3808	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	9250229.37	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3808
3809	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	157897.17	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3809
3810	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3810
3811	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3811
3812	13-SoCal_PowerCogeneration (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3812
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2 Tab Cont	tents				
This wor	kbook contains select tabs (including this one) from a propr	ietary Stantec ca	Iculation tool. This data is copied from		
"ALP1_G	GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
	HG Calc" to produce the results in "4. Calculations".				
4 In this w	orkbook, the terms "Low", "Mid", and "High" correspond to	the "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6 Equipme		Fuel Type	Parameter	Value	Reference
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3814
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3815
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3816
	I_PowerCogeneration (LowConservative_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3817
	I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3818
	I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3819
	I_PowerCogeneration (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3820
	I_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3821
	I_PowerCogeneration (LowConservative_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3822
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3824
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3825
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3826
	I_PowerCogeneration (LowConservative_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3827
	I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3828
	I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3829
	I_PowerCogeneration (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3830
	I_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3831
	I_PowerCogeneration (LowConservative_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3832
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3834
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3835
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3836
	I_PowerCogeneration (LowConservative_ECGeneral)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3837
	I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3838
	I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3839
	PowerCogeneration (LowConservative_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3840
	I_PowerCogeneration (LowConservative_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3841
	I_PowerCogeneration (LowConservative_ECGeneral) I_PowerCogeneration (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3842
		_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3844
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3845
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3846
	I_PowerCogeneration (LowConservative_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3847
	PowerCogeneration (LowConservative_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT3848
	I_PowerCogeneration (LowConservative_ECGeneral) I_PowerCogeneration (LowConservative_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3849
	I_PowerCogeneration (LowConservative_ECGeneral)	2045_H2-NG 2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3850 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3851
	I_PowerCogeneration (LowConservative_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3852
		_	NG CO2 EF (MT CO2/MMBtu)		
	I_PowerCogeneration (LowConservative_ECGeneral) I_PowerCogeneration (LowConservative_ECGeneral)	_	NG CO2 EF (MT CO2/MINBLU) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3854 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3855
	I_PowerCogeneration (LowConservative_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3856 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3856
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3997
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3998
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT3999
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4000
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4001
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4002
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4004
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4005
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4006
_	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4007
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4008
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4009
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4010
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4011
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4012
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4014
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4015
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4016
_	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4018
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4018
	14-SoCal_PowerCogeneration (LowConservative_ECOvens) 14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4019 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4020
		_	BSL NG Consumption (MMBtu/yr)		
	14-SoCal_PowerCogeneration (LowConservative_ECOvens) 14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4022
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4022 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4024
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4025
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4026
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4027
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4028
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4029
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4030
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4031
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4032
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4034
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4035
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4036
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4037
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4038
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4039
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro	prietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P	ower" tab. The ing	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	•	, c	Ť	
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	g. conceptual		,		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4040
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4041
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4042
	14-SoCal_PowerCogeneration (LowConservative_Ecovens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4044 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4044
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	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4045
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4046
-	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4047
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4048
_	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4049
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4050
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4051
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4052
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4054
4055	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4055
4056	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4056
4057	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4057
4058	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	3070363.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4058
4059	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	213769.57	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4059
4060	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4060
4061	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4061
4062	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4062
4064	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4064
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2036 H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4065
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4066
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4067
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4068
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4069
-	14-SoCal_PowerCogeneration (LowConservative_Ecovens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, Data Prep Power, Cell AT4070
	14-SoCal_PowerCogeneration (LowConservative_Ecovens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4071
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4071 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4072
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4072 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4074
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		
	-	_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4075
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4076
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4077
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4078
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4079
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4080
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4081
4082	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4082

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4084
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4085
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4086
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4087
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4088
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4089
	14-SoCal_PowerCogeneration (LowConservative_ECOvens) 14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4090
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4091 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4092
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4092 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4094
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	NG CO2 ET (NT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4094 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4095
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4095 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4096
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4090 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4097
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4098
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4099
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4100
-	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4101
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4102
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4104
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4105
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4106
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4107
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4108
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4109
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4110
-	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4111
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4112
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4114
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4115
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4116
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4117
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4118
\vdash	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4119
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4120
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4121
4122	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4122
4124	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4124
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_ 2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4125
4126	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4126
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4127
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4128
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4129
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4130
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4131
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4132
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4134
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4135
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4136
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4137
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4138
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4139
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4140
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4141
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4142
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4144
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4145
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4146
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4147
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4148
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4149 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4150
	14-SoCal_PowerCogeneration (LowConservative_ECOvens) 14-SoCal_PowerCogeneration (LowConservative_ECOvens)		Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4150 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4151
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4151 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4152
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4154 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4154
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4155
	14-SoCal_PowerCogeneration (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4156
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4297
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4298 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4298
	15-SoCal PowerCogeneration (LowConservative ICEngines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4299
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4300
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4301
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4301 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4302
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4304
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4305
_	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4306
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4307
_	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4308
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4309

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	•	·		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		II IIaa I . II . IIIa I		
5	In this workbook, the terms "Low", "Mid", and "High" correspond t	to the "Conservati	/e ', 'Moderate', and "Ambitious" market scenarios.		
6	Equipment ID	 Fuel Type	Parameter	Value	Reference
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	•	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4310
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4311
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4312
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4314
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4315
4316	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4316
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4317
4318	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)	535189.48	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4318
4319	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	161799.86	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4319
4320	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4320
4321	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4321
4322	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4322
4324	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4324
4325	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4325
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4326
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4327
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4328
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4329
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4330
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4331
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4332
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4334
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4335
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4336
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4337
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4338
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4339
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4340
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4341
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4344
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4344
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4346
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4346
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4347
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4348
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4349
	15-SoCal_PowerCogeneration (LowConservative_ICEngines) 15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4350 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4351
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4351 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4352
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Potential Control of the	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4354
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4355
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4356
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4357
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4358
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4359
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4360
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4361
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4362
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4364
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4365
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4366
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4367
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4368
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4369
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4370
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4371
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4372
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4374
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4375
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4376 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4377
	15-SoCal_PowerCogeneration (LowConservative_ICEngines) 15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4378 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4378
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4379 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4379
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4380
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4381
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4382
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4384
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2038_H2-NG	NG CO2 ET (NT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4385
	15-SoCal PowerCogeneration (LowConservative_IcEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1 GHG Industrow 3 DataPrep SoCalGas.xlsx, Data Prep Power, Cell AT4386
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Frep_Fower, Cell AT4387 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4387
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4388
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4389
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4390
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4391
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4392
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4394
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4395
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4396
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4397	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4397
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4398
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_ 2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4399
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_ 2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4400
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_ 2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4401
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4402
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4404
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4405
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4406
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4407
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4408
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4409
_	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4410
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4411
	2 15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4412
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4414
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4415
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4416
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4417
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4418
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4419
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4420
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4421
	2 15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4422 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4422
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4422 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4424
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_	NG CO2 ET (NT CO2/MINISTU) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4425
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		
	-	-			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4426
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4427
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4428
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4429
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4430
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4431
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4432
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4434
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4435
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4436
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4437
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4438
4439	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	49/01.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4439

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		•		
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5				-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4440	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4440
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_ 2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4441
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_ 2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4442
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4444
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4445
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4446
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4447
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4448
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4449
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4450
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4451
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4452
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4454 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4454
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4455
	-	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4455 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4456
	15-SoCal_PowerCogeneration (LowConservative_ICEngines)	_			
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4597
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4598
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4599
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4600
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4601
—	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4602
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4604
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4605
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4606
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4607
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4608
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4609
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4610
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4611
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4612
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4614
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4615
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4616
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4617
4618	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4618
4619	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	161799.86	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4619
4620	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4620
4621	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4621
4622	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4622

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4624	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4624
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4625
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_ 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4626
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4627
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4628
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4629
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4630
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4631
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4632
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4634
_	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4635
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4636
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4637
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4638
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4639
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4640
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4641
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4642
-	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4644
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4645
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4646
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4647
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4648
	16-SoCal PowerCogeneration (LowConservative ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4649
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4650
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4651
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	16-SoCal_PowerCogeneration (LowConservative_ICTurbines) 16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4652 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4654
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MINISTU) NG CH4 EF (MT CH4/MMBtu)		
		_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4655
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2035_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4656
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4657
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4658
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (sef/100-sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4659
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4660
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4661
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4662
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4664
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4665
4666	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4666

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a propr	ietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pov	wer" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4667
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4668
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4669
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines) 16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4670 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4671
-	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4671 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4672
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4672 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4674
-	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MM8tu) NG CH4 EF (MT CH4/MM8tu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4675 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4675
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4676
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4677
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4678
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4679
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4680
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_ 2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4681
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_ 2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4682
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4684
4685	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4685
4686	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4686
4687	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	99.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4687
4688	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	6343642.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4688
4689	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	197921.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4689
4690	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4690
4691	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4691
4692	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4692
4694	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4694
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4695
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4696
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4697
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4698
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4699
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4700
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4701
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4702
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4704
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4705
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4706
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4707
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4708
4/05	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	15/89/.1/	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4709

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4710
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4711
_	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4712
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4714
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4715
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4716
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4717
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4718
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4719
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines) 16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4720 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4721
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4721 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4722
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4722 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4724
	16-SoCal_PowerCogeneration (LowConservative_iCTurbines)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4725
	16-SoCal_PowerCogeneration (LowConservative_iCTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4726
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4727
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4728
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4729
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4730
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4731
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4732
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4734
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4735
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4736
4737	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	99.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4737
4738	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	14780159.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4738
4739	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	49701.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4739
4740	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4740
4741	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4741
4742	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4742
4744	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4744
4745	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4745
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4746
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4747
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4748
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4749
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4750
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4751
4752	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4752

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	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	he "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.		
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——	Equipment ID	Fuel Type	Parameter	Value	Reference
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4754
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4755
	16-SoCal_PowerCogeneration (LowConservative_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4756
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4897
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4898
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4899
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4900
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4901
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4902
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4904
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4905
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4906
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4907
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4908
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4909
-	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4910
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral) 17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4911 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4912
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4912 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4914
	17-Socal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4915
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4916
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4917
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4918
	17-Socal_PowerCogeneration (MidModerate_EcGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4919
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4920
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4921
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4922
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4924
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4925
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4926
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4927
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4928
\vdash	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4929
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4930
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4931
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4932
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4934
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4935
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4936

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	This workbook contains select tabs (including this one) from a p	roprietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_	Power" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	- ·		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspor	nd to the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	The state of the s		,		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	17-SoCal PowerCogeneration (MidModerate ECGeneral)	2034 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4937
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4938
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4939
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4940
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		
_	-	_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT4941
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4942
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4944
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4945
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4946
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4947
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4948
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4949
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4950
4951	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4951
4952	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4952
4954	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4954
4955	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4955
4956	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4956
4957	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4957
4958	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	7134061.40	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4958
4959	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	496698.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4959
4960	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4960
4961	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4961
4962	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4962
4964	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4964
-	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4965
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4966
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, Data Prep Power, Cell AT4967
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4968
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4969
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4970
	17-SoCal PowerCogeneration (MidModerate ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4971
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4972
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4974
	17-Socal_PowerCogeneration (MidModerate_EcGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4975
	17-Socal_PowerCogeneration (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4976 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4976
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	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4977
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4978
49/5	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	480454.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4979

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2	Tab Contents				_
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5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4980
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4981
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4982
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4984
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4985
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4986
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4987
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4988
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4989
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4990
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4991
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4992
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4994
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4995
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4996
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4997
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4998
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT4999
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5000
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5001
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5002
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5004
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5005
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5006
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5007
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5008
—	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5009
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral) 17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5010
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral) 17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5011 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5012
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral) 17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG 2041_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5012 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5014
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MM8tu) NG CH4 EF (MT CH4/MM8tu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5014 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5015
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral) 17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5015 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5016
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xisx, Data_Prep_Power, Cell AT5016 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xisx, Data_Prep_Power, Cell AT5017
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5017 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5018
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5018 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5019
_	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xisx, Data_Prep_Power, Cell AT5019 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xisx, Data_Prep_Power, Cell AT5020
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5020 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5021
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5022
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2	Tab Contents						
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5			· · · · · · · · · · · · · · · · · · ·				
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	• •	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5024		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5025		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5026		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5027		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5028		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5029		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5030		
	17-SoCal_PowerCogeneration (MidModerate_EcGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5031		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5032		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5032 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5034		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5035 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5035		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5036		
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	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5037		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5038		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5039		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5040		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5041		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5042		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5044		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5045		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5046		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5047		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5048		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5049		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5050		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5051		
-	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5052		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5054		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5055		
	17-SoCal_PowerCogeneration (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5056		
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5197		
-	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5198		
5199	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)	239988.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5199		
5200	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5200		
5201	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5201		
5202	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5202		
5204	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5204		
5205	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5205		
5206	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5206		
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
	_	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5207
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5208
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5209
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5210
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5211
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5212
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5214
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5215
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5216
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5217
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5218
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5219
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5220
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5221
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5222
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5224
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5225
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5226
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5227
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5228
	18-SoCal_PowerCogeneration (MidModerate_ECOvens) 18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5229
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5230 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5231
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5231 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5232
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5234
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5235
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5236
	18-SoCal PowerCogeneration (MidModerate ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5237
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5238 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5238
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5239
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5239 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5240
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5240 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5241
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5241 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5242
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5244
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5245
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5246
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5247
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5248
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5249
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a propr	ietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pov	wer" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5250
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5251
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5252
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5254
_	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5255
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5256
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5257
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5258
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5259
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5260
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5261
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5262
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5264
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5265
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5266
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5267
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5268
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5269
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5270
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5271
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5272
5274	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5274
5275	18-SoCal_PowerCogeneration (MidModerate_ECOvens)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5275
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5276
-	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5277
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5278
	18-SoCal_PowerCogeneration (MidModerate_ECOvens) 18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5279 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5280
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5281		2038_H2-NG 2038 H2-NG	BSL NG Consumption (MMBtu/yr) O2 Parcent (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5281 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, Data Prep Power, Cell AT5282
5282	_ , _ ,	_	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2038_H2-NG 2038_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5284
5285	18-SoCal_PowerCogeneration (MidModerate_ECOvens) 18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5285
5287	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5286 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5287
		2039_H2-NG 2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		
5288	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5288 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5289
5200		_	Blend % H2 (scf/100-scf)		
	18-SoCal_PowerCogeneration (MidModerate_ECOvens) 18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5290
5291	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5291
J23 <u>Z</u>	Tro-20061 Lower cokenieration (initalinionerate Econelis)	2035_HZ-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5292

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P				
3	Power GHG Calc" to produce the results in "4. Calculations".	·	·		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	, , , , , , , , , , , , , , , , , , , ,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	18-SoCal PowerCogeneration (MidModerate ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5294
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5295
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5296
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5297
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5298
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5299
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5300
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2040_H2-NG 2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5300 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5301
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_			
_	-	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5302
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5304
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5305
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5306
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5307
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5308
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5309
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5310
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5311
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5312
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5314
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5315
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5316
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5317
-	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5318
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5319
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5320
5321	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5321
5322	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5322
5324	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5324
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5325
5326	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5326
5327	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5327
5328	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	29726164.69	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5328
5329	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	215123.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5329
5330	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5330
5331	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5331
5332	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5332
5334	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5334
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5335
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5336
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5337	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5337
5338	18-SoCal_PowerCogeneration (MidModerate_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)	34342051.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5338
5339	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)	115483.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5339
5340	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5340
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5341
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5342
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5344
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5345
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5346
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5347
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5348
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5349
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5350
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5351
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5352
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5354
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5355
	18-SoCal_PowerCogeneration (MidModerate_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5356
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5497
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5498
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5499
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5500
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5501
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5502
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5504
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5505
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5506
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5507
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5508
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5509
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5510
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5511
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5512
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5514
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5515
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5516
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5517
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5518
5519	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	3/5945.80	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5519

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	wer" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5520
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5521
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5522
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5524
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5525
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5526
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5527
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5528
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5529
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5530
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5531
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5532
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5534
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5535
	19-SoCal_PowerCogeneration (MidModerate_ICEngines) 19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5536 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5537
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5538 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5538
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5539
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5540
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5541
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5542
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5544
5545	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5545
5546	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5546
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5547
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5548
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5549
	19-SoCal PowerCogeneration (MidModerate ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5550
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5551
5552	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5552
5554	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5554
5555	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5555
5556	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5556
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5557
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5558
5559		_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5559
5560	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5560
5561	1 . – . – –	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5561
5562	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5562

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P				
3	Power GHG Calc" to produce the results in "4. Calculations".	·		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	, , , , , , , , , , , , , , , , , , , ,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5564
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5565
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5566
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5567
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5568
	-	_			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Bland % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5569
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5570
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5571
_	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5572
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5574
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5575
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5576
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5577
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5578
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5579
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5580
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5581
5582	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5582
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5584
5585	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5585
5586	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5586
5587	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5587
5588	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	14739602.31	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5588
5589	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	459874.94	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5589
5590	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5590
5591	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5591
5592	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5592
5594	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5594
5595	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5595
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5596
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5597
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5598
_	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5599
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5600
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5601
	2 19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5602
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5604
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5605
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5606
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2	Tab Contents							
	This workbook contains select tabs (including this one) from a proprie							
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Power" tab. The input data in this tab was processed through the function in "3.1 EQ							
3	Power GHG Calc" to produce the results in "4. Calculations".							
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservati	ve", "Moderate", and "Ambitious" market scenarios.					
5								
6	Equipment ID	Fuel Type	Parameter	Value	Reference			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5607			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5608			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5609			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5610			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5611			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5612			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5614			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5615			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5616			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5617			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5618			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5619			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5620			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5621			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5622			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5624			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines) 19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5625 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5626			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2042_H2-NG						
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2043_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5627 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5628			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5629			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5630			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5631			
-	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5632			
		2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5634			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5635			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5636			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5637			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5638			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5639			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5640			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5641			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5642			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5644			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	_ 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5645			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5646			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5647			
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5648			
5649	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5649			
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		· · · · · · · · · · · · · · · · · · ·		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5650
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5651
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5652
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5654
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5655
	19-SoCal_PowerCogeneration (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5656
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5797
	20-SoCal_PowerCogeneration (MidModerate_iCTurbines)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5798
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5799 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5799
	20-SoCal_PowerCogeneration (MidModerate_iCTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5800
_	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5801
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		
	-	2030_H2-NG 2030_H2-NG			ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT5802
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5804
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5805
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5806
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5807
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5808
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5809
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5810
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5811
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5812
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5814
-	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5815
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5816
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5817
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5818
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5819
_	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5820
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5821
—	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5822
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5824
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5825
5826	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5826
5827	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	99.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5827
5828	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2033_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	2283540.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5828
5829	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2033_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	424020.93	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5829
5830	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5830
5831	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5831
5832	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5832

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	orietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5834
5835	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5835
5836	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5836
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5837
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5838
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5839
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5840
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5841
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5842
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5844
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5845
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5846
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5847
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5848
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5849
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5850
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5851
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5852
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5854
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5855
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5856
5857	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5857
5858	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5858
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5859
-	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5860
5861	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5861
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	-	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5862
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5864
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5865
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5866
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5867
5868	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5868
5869	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5869
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5870
5871	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5871
58/2	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5872
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5874
5875	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5875
58/6	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5876

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3 Power Gill Colf* to produce the results in *2. Actualistics**.		This workbook contains select tabs (including this one) from a proprie	etary Stantec ca	lculation tool. This data is copied from		
A Inthis workbook, the terms "low", "Mid", and "High" correspond to the "Consecrative", "Moderate", and "Anabition" market scenarios.			er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
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20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 204			_			
2041_H2-NG PRJ Blend-H2 Demand (MMBtu/yr) 366877.81 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5909 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG Blend % H2 (scf/100-scf) 17.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5910 5911 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG BSL NG Consumption (MMBtu/yr) 73095879.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5911 5912 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG O2 Percent (scf/100-scf) 15.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5912 5914 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5914 5915 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG NG CO2 EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5915 5916 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG NG NO EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5916						
20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG Blend % H2 (scf/100-scf) 17.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5910 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG BSL NG Consumption (MMBtu/yr) 73095879.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5911 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 02 Percent (scf/100-scf) 15.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5912 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5914 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5915 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5915 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5916			_			
20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 2041_			_			
20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 2041_H			_			
591420-SoCal_PowerCogeneration (MidModerate_ICTurbines)2041_H2-NGNG CO2 EF (MT CO2/MMBtu)0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5914591520-SoCal_PowerCogeneration (MidModerate_ICTurbines)2041_H2-NGNG CH4 EF (MT CH4/MMBtu)0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5915591620-SoCal_PowerCogeneration (MidModerate_ICTurbines)2041_H2-NGNG N2O EF (MT N2O/MMBtu)0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5916			_			
20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG 2041_H						
5916 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2041_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5916			_			
			_			
2042_Hz-NG Equip. Introughput Fraction (ininitial) 39.01 ALP1_GHG_industrow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell A15917 39.01 ALP1_GHG_industrow_3_DataPrep_SocalGas.xisx, Data_Prep_Power, Cell A15917		20-SoCal_PowerCogeneration (MidModerate_ICTurbines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5917
5918 20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2042_H2-NG PRJ 100%-H2 Demand (MMBtu/yr) 25443189.94 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5918			2042_H2-NG			
20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2042_H2-NG PRJ Blend-H2 Demand (MMBtu/yr) 298922.16 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5919	5919	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	298922.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5919

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a property				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pe	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		· · · · · · ·		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5920
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5921
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5922
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5924
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5925
	20-SoCal_PowerCogeneration (MidModerate_iCTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5926
	20-SoCal_PowerCogeneration (MidModerate_iCTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5927
_	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5928 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5928
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5929 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5929
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG 2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5930 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5930
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5930 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5931
		_			
_	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5932
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5934
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5935
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5936
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5937
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5938
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5939
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5940
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5941
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5942
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5944
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5945
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5946
5947	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	99.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5947
	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	39290849.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5948
5949	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5949
5950	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5950
5951	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5951
5952	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5952
5954	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5954
5955	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5955
5956	20-SoCal_PowerCogeneration (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT5956
6097	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6097
6098	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6098
6099	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	390182.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6099
6100	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6100
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_ 2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6101
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_ 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6102
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
6104	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2030 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6104
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6105
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_ 2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6106
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_ 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6107
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6108
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6109
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6110
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6111
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6112
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6114
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6115
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6116
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6117
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6118
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6119
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6120
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6121
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6122 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6122
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6124
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6125
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)		NG N2O EF (MT N2O/MMBtu)		
	-	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6126 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6127
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6128
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6129
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6130
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6131
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6132
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6134
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6135
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6136
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6137
_	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6138
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6139
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6140
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6141
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6142
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6144
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6145
6146	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6146

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2	Tab Contents				
	This workbook contains select tabs (including this one) from a prop	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the functior	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6147
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6148
_	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6149
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6150
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6151
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6152
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6154
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6155
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6156
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6157
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6158
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6159
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6160
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6161
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6162
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6164
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6165
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6166
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6167
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6168 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6169
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6169 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6170
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral) 21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6170 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6171
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6171 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6172
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6174
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6175
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6176
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6177 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6177
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6178
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6179
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6180
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6181
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6182
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6184
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6185
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6186
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6187
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6188
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)		PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6189
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
6190	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6190
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_ 2039 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6191
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6192
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6194
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6195
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6196
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6197
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6198
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6199
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6200
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6201
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6202
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6204
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6205
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6206
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6207
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6208
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6209
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6210
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6211
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6211 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6212
	21-Socal_PowerCogeneration (HighAmbitious_EcGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6212 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6214
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	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6215
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6216
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6217
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6218
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr) Bland % H2 (sef/100 sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6219
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6220
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6221
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6222 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6224
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		
_	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6225
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6226
_	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6227
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6228
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6229
_	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6230
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6231
6232	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6232

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2	Tab Contents			1	
	This workbook contains select tabs (including this one) from a prop			. 112.4.50	
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po	ower" tab. The inp	ut data in this tab was processed through the function	1 IN "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	a tha IICanaan ati	I II I		
5	In this workbook, the terms "Low", "Mid", and "High" correspond t	o the Conservati	/e , Moderate , and Ambitious market scenarios.		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	•	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6234
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6235
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6236
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6237
6238	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	55834739.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6238
6239	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	187757.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6239
6240	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6240
6241	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6241
6242	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6242
6244	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6244
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6245
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6246
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6247
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6248
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6249
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6250
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6251
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6252
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6254
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6255
	21-SoCal_PowerCogeneration (HighAmbitious_ECGeneral)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6256
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6397
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6398
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6399 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6400
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens) 22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_			
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6401 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6402
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6404 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6404
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6405
	22-SoCal PowerCogeneration (HighAmbitious ECOvens)	2030_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6406
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6407
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6408
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6409
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6410
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6411
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6412
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6414
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6415
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6416
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a proprie				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pow	er" tab. The inp	ut data in this tab was processed through the function	in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to t	he "Conservativ	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6417
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6418
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6419
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6420
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6421
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6422
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6424
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6425
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6426
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6427
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6428
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6429
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6430
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6431
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6432
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6434
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6435
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens) 22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6436
		_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6437 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6438
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens) 22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6439
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Frep_Fower, Cell AT6440
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6441
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6441 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6442
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6444
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6445
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6446
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6447
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6448
	22-SoCal PowerCogeneration (HighAmbitious ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6449
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6450
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6451
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6452
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6454
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6455
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6456
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6457
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6458
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6459
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a pro				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".		•		
	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6460
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6461
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2036_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6462
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6464
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6465
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6466
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6467
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6468
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6469
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6470
	22-SoCal_PowerCogeneration (HighAmbitious_Ecovens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6471
	22-SoCal_PowerCogeneration (HighAmbitious_Ecovens)	-	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6472
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6474 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6474
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	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6475
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6476
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6477
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6478
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6479
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6480
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6481
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6482
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6484
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6485
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6486
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6487
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6488
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6489
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6490
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6491
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6492
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6494
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6495
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6496
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6497
6498	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6498
6499	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	681212.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6499
6500	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6500
6501	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6501
6502	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6502

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2	Tab Contents			1	
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١	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_P		ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations". In this workbook, the terms "Low", "Mid", and "High" corres		o" "Moderate" and "Ambitique" market scenarios		
5	The tries workbook, the terms flow , who , and high corres	spond to the Conservativ	e , Moderate , and Ambitious market scenarios.		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6504
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6505
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6506
6507	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6507
6508	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	34944422.08	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6508
6509	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	596485.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6509
6510	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6510
6511	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6511
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6512
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6514
6515	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6515
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6516
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6517
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)		PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6518
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6519
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6520
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)		BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6521
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6522
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6524
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)		NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6525
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6526
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6527
_	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6528
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6529
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6530
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6531
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	—	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6532
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6534
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6535
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG N2O EF (MT N2O/MMBtu) Fauin Throughput Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6536
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens) 22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRI 100% H3 Demand (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT6537
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr) PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6538
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6539
$\overline{}$	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6540 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6541
-	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6541 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6542
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6544
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6545 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6545
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6546
0340	22 30cm_i owereogeneration (mgnAmbitious_teovens)	2044_112-110	NO NZO LI (IVII NZO) IVIIVIDIU)	0.00	TEL 1_GITG_ITIGUSTI OW_5_Data TCP_50CatGas.xisx, Data_FTEP_FOWET, CEll A10540

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2	Tab Contents				
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	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P	ower" tab. The inp	ut data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	·	, , , , , , , , , , , , , , , , , , ,		
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve". "Moderate". and "Ambitious" market scenarios.		
5	land the transfer of the trans		,		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6547
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6548
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6549
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6550
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6551 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6552
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	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6554
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6555
	22-SoCal_PowerCogeneration (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6556
	7 23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6697
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6698
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6699
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6700
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6701
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6702
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6704
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6705
6706	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6706
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6707
6708	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6708
6709	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	511492.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6709
6710	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6710
6711	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6711
6712	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6712
6714	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6714
6715	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6715
6716	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6716
6717	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6717
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2032_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	2021775.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6718
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	611228.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6719
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6720
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6721
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6722
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6724
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6725
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6726
	7 23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6727
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6728
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6729
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	This workbook contains select tabs (including this one) from a pro	orietary Stantec ca	lculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P	ower" tab. The inp	out data in this tab was processed through the function	n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6730
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033 H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6731
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6732
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6734
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6735
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6736
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6737
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6738
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6739
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6740
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6741
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6742
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6744 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6744
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	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6745
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6747
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6747
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6748
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6749
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6750
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6751
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6752
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6754
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6755
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	-	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6756
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6757
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6758
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6759
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6760
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6761
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6762
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6764
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6765
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6766
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6767
6768	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6768
6769	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	810854.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6769
6770	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6770
6771	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6771
6772	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6772

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2	Tab Contents						
	This workbook contains select tabs (including this one) from a pro						
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_P						
3	3 Power GHG Calc" to produce the results in "4. Calculations".						
4	In this workbook, the terms "Low", "Mid", and "High" correspond	to the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.				
5							
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
6774	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6774		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6775		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6776		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6777		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6778		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6779		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6780		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6781		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6782		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6784		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6785		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6786		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6787		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	-	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6788		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG 2039_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6789		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6790		
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6791		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6792		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6794		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG	NG CO2 ET (NT CO2/MINISTR) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6795		
	1	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6796		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines) 23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)				
		2040_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6797		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6798		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	-	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6799		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6800		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6801		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6802		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6804		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6805		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6806		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6807		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6808		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6809		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6810		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6811		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6812		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6814		
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6815		
6816	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6816		

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2	Tab Contents					
	This workbook contains select tabs (including this one) from a proprietary Stantec calculation tool. This data is copied from					
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po					
3	Power GHG Calc" to produce the results in "4. Calculations".					
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.			
5		_				
6	Equipment ID	Fuel Type	Parameter	Value	Reference	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6817	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6818	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6819	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6820	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6821	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6822	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6824	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6825	
-	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6826 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6827	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines) 23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6827 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6828	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6829	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6830	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6831	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6832	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6834	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6835	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6836	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6837	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_ 2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6838	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6839	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6840	
6841	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6841	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6842	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6844	
6845	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6845	
6846	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6846	
6847	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6847	
6848	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	63880701.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6848	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6849	
6850	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6850	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6851	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6852	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6854	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6855	
	23-SoCal_PowerCogeneration (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6856	
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6997	
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6998	
6999	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	390182.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT6999	

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2	Tab Contents						
	This workbook contains select tabs (including this one) from a proprietary Stantec calculation tool. This data is copied from						
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Power" tab. The input data in this tab was processed through the function in "3.1 EQ						
3	Power GHG Calc" to produce the results in "4. Calculations".						
4	In this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenarios.						
5		_					
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7000		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7001		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7002		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7004		
_	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7005		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7006		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7007		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7008		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7009		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7010		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7011		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7012		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7014		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7015		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7016		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7017		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7018		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7019		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, Data_Prop_Power, Cell AT7020		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7022		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines) 24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)				
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMStu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7024 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7025		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7026		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7020 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7027		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7028		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7029		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2033_H2-NG 2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7030		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7030 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7031		
	24-SoCal PowerCogeneration (HighAmbitious ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7032		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2033_H2-NG 2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7034		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 ET (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7035		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7036		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2033_H2 NG 2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7037		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7038		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7039		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7040		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7041		
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7042		
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2	Tab Contents			1	
	This workbook contains select tabs (including this one) from a prop	•	•	. 112.4.50	
_	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Power_GUG_Galatitation "4. Galatitation "4. Galatita	ower" tab. The inp	ut data in this tab was processed through the function	1 IN "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	a tha IICanaan ati	I II I		
5	In this workbook, the terms "Low", "Mid", and "High" correspond to	o the Conservati	/e , Moderate , and Ambitious market scenarios.		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)		NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7044
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7045
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7046
_	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7047
7048	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	8454496.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7048
7049	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	780995.48	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7049
7050	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7050
7051	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7051
7052	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7052
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7054
7055	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7055
_	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7056
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7057
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7058
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7059
-	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7060
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7061
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7062
_	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7064
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7065
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7066
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7067
-	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7068
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7069
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	-	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7070
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7071 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7072
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines) 24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7072 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7074
-	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7075
	24-SoCal PowerCogeneration (HighAmbitious ICTurbines)	2037_H2-NG 2037_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7076
\vdash	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7077 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7077
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7078
	24-50Cal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7079 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7079
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7080
-	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7081
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7082
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7084
_	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7085
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7086
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2	Tab Contents				
	This workbook contains select tabs (including this one) from a propi	rietary Stantec ca	Iculation tool. This data is copied from		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Po				
3	Power GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7087
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7088
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7089
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7090
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7091
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7092
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7094
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7095
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7096
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7097
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7098
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7099
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7100
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7101
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7102
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7104
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7105
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7106
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7107
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7108
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7109 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7110
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines) 24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7110 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7111
-	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7111 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7112
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7114 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7114
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7115
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7116 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7116
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2041_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7117 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7117
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG 2042_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7117 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7118
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7119
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG 2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7120
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7121
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7121 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7122
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7124
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7125
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7126
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7127
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7128
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7129
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2	Tab Contents	7			
	This workbook contains select tabs (including this one) from a propr				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "2. Data_Prep_Pov			n in "3.1 EQ	
3	Power GHG Calc" to produce the results in "4. Calculations".	·	,		
4	In this workbook, the terms "Low", "Mid", and "High" correspond to	the "Conservati	ve", "Moderate", and "Ambitious" market scenarios.		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7130	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7130
7131	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7131
7132	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7132
7134	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7134
7135	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7135
7136	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7136
7137	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	99.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7137
7138	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	55834739.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7138
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	PRJ Blend-H2 Demand (MMBtu/yr)	187757.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7139
7140	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7140
7141	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	73095879.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7141
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7142
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7144
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7145
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7146
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7147
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ 100%-H2 Demand (MMBtu/yr)	63880701.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7148
7149	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ Blend-H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7149
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	17.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7150
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7151
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7152
	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7154
-	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	_	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7155
7156	24-SoCal_PowerCogeneration (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, Data_Prep_Power, Cell AT7156

5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral) 2035_H2-NG 10/15/2024

Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ 100%-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu) + PRJ Blend-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate (MMBtu/yr) - PRJ Overall H2 Heat Rate (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = NG CH4 EF (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral) 2035_H2-NG 10/15/2024

BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

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PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/vr) = PRJ Overall H2 Heat Rate (MMBtu/vr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ 100%-H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ Blend-H2 Demand (MMBtu/yr) = Percent of annual hydrogen demand combusted as a blended fuel (sectorwide)

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Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Power GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	5.67	MMBtu/100- MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1347
PRJ 100%-H2 Demand	17,893,609.49	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1348
PRJ Blend-H2 Demand	3,141,898.06	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1349
Blend % H2	26.58	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1350
Blend % NG	73.42	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	4.46	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	95.54	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	10.80	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)

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Parameter	Value	Units	Resource
Blend % NG (Heat)	89.20	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	1,472,873.96	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf

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Parameter	Value	Units	Resource
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	24,160.27	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NO2)	46.00	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrogen-dioxide
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane

Parameter	Value	Units	Resource
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	13,993,412,719.99	scf/yr	Calculated Below
PRJ H2 Vol	3,500,588,733.93	scf/yr	Calculated Below
PRJ NG Vol	12,823,117,858.94	scf/yr	Calculated Below
BSL NG Consumption	251525106.00	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1351
BSL Overall Heat Rate	14,273,280.97	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	14,273,280.97	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	1,015,407.65	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	178,293.11	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	1,193,700.76	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	11,606,706.26	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy

Parameter	Value	Units	Resource
			energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	1,472,873.96	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	13,079,580.22	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.05	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,414.68	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	3.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1352
O2 Correction	1.17	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.03	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1354

Parameter	Value	Units	Resource
NG CH4 EF	0.00	MT CH4/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1355
NG N2O EF	0.00	MT N2O/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1356
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.0000011	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.000001	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.000007	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000010	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	757,340.29	MT CO2e/yr	Calculated Below
BSL CH4	425.34	MT CO2e/yr	Calculated Below
BSL N2O	389.66	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	615,851.83	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	345.88	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	316.86	MT CO2e/yr	Calculated Below
PRJ 100%-NG GHG	616,514.58	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ Blend-NG CO2	77,656.16	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	46.73	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	42.81	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	77,745.70	MT CO2e/yr	Calculated Below
Displaced CO2	63,337.76	MT CO2e/yr	Calculated Below
Displaced CH4	35.57	MT CO2e/yr	Calculated Below
Displaced N2O	32.59	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	48.18	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	200.42	MT CO2e/yr	Calculated Below
PRJ Overall CO2	693,508.00	MT CO2e/yr	Calculated Below
PRJ Overall CH4	392.61	MT CO2e/yr	Calculated Below
PRJ Overall N2O	608.27	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 251,525,106.0 (MMBtu/yr) x 5.6746943 (MMBtu/100-MMBtu) = 14,273,280.9743918 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 251,525,106.0 (MMBtu/yr) x 5.6746943 (MMBtu/100-MMBtu) = 14,273,280.9743918 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 17,893,609.4914102 (MMBtu/yr) x 5.6746943 (MMBtu/100-MMBtu) + 3,141,898.0625345 (MMBtu/yr) x 5.6746943 (MMBtu/100-MMBtu) = 1,193,700.758271 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 14,273,280.9743918 (MMBtu/yr) - 1,193,700.758271 (MMBtu/yr) = 13,079,580.2161208 (MMBtu/yr)

BSL NG Vol (scf/yr) = 14,273,280.9743918 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 13,993,412,719.992 (scf/yr)

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PRJ NG Vol (scf/yr) = 13,079,580.2161208 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 12,823,117,858.942 (scf/yr)

PRJ H2 Vol (scf/yr) = 1,193,700.758271 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 341.0 (Btu/scf) = 3,500,588,733.93258 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) ÷ 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

Fd Blend (scf/MMBtu) = 10.7980056 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 89.2019944 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,414.6798655 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 4.455663 (lb/100-lb) x 60,920.0 (Btu/lb) + 95.544337 (lb/100-lb) x 22,446.0 (Btu/lb) = 24,160.2717754 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.0285458 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,414.6798655 (scf/MMBtu) = 0.0527242 (MT CO2/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.0285458 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,414.6798655 (scf/MMBtu) = 0.0000011 (MT CH4/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.0285458 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,414.6798655 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} \times 44.013 \text{ (lb/pmole)} \times 5.975.0492449 \text{ (scf/MMBtu)} \times 1.1675978 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1.000.0 \text{ (kg/MT)} = 0.0000007 \text{ (MT/MMBtu)}$

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.0285458 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} x 44.013 \text{ (lb/pmole)} x 8,414.6798655 \text{ (scf/MMBtu)} x 1.1675978 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.000001 \text{ (MT/MMBtu)}$

BSL CO2 (MT CO2/yr) = 14.273,280.9743918 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 757,340.2885012 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 14,273,280.9743918 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 757,340.2885012 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 14,273,280.9743918 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 14.273281 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 14,273,280.9743918 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 425.343773 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 14,273,280.9743918 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 1.4273281 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 14,273,280.9743918 (MMBtu/yr) x 0.00000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 389.6605706 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 757,340.2885012 (MT CO2e/yr) + 425.343773 (MT CO2e/yr) + 389.6605706 (MT CO2e/yr) = 758,155.2928449 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 11,606,706.259682 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 615,851.8341387 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 11,606,706.259682 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 615,851.8341387 (MT CO2e/yr)

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PRJ 100%-NG CH4 (MT CH4/yr) = 11,606,706.259682 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 11.6067063 (MT CH4/yr)

PRJ 100%-NG CH4 (MT CO2e/yr) = 11,606,706.259682 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 345.8798465 (MT CO2e/yr)

PRJ 100%-NG N2O (MT N2O/yr) = 11,606,706.259682 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 1.1606706 (MT N2O/yr)

PRJ 100%-NG N2O (MT CO2e/yr) = 11,606,706.259682 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 316.8630809 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 615,851.8341387 (MT CO2e/yr) + 345.8798465 (MT CO2e/yr) + 316.8630809 (MT CO2e/yr) = 616,514.5770662 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 1,472,873.9564388 (MMBtu/yr) x 0.0527242 (MT CO2/MMBtu) = 77,656.1616774 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 1,472,873.9564388 (MMBtu/yr) x 0.0527242 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 77,656.1616774 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 1,472,873.9564388 (MMBtu/yr) x 0.0000011 (MT CH4/MMBtu) = 1.5680857 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 1,472,873.9564388 (MMBtu/yr) x 0.0000011 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 46.7289533 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 1,472,873.9564388 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.1568086 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 1,472,873.9564388 (MMBtu/yr) x 0.00000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 42.8087391 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 77,656.1616774 (MT CO2e/yr) + 46.7289533 (MT CO2e/yr) + 42.8087391 (MT CO2e/yr) = 77,745.6993698 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 178,293.1117797 (MMBtu/yr) x 0.000001 (MT N2O/MMBtu) = 0.1764962 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 178,293.1117797 (MMBtu/yr) x 0.000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 48.1834577 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 1,015,407.6464913 (MMBtu/yr) x 0.0000007 (MT N2O/MMBtu) = 0.7341225 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 1,015,407.6464913 (MMBtu/yr) x 0.0000007 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 200.4154333 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 615,851.8341387 (MT CO2e/yr) + 77,656.1616774 (MT CO2e/yr) = 693,507.9958161 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 345.8798465 (MT CO2e/yr) + 46.7289533 (MT CO2e/yr) = 392.6087998 (MT CO2e/yr)

5-SoCal_PowerPeakerBaseload (MidModerate_ECGeneral) 2035_H2-NG 10/15/2024

PRJ Overall N2O (MT CO2e/yr) = 48.1834577 (MT CO2e/yr) + 200.4154333 (MT CO2e/yr) + 42.8087391 (MT CO2e/yr) + 316.8630809 (MT CO2e/yr) = 608.2707111 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 693,507.9958161 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 693,507.9958161 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 392.6087998 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 13.1747919 (MT CH4/yr)

PRJ Overall N2O (MT N2O/yr) = 608.2707111 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 2.2280978 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 48.1834577 (MT CO2e/yr) + 200.4154333 (MT CO2e/yr) + 77,745.6993698 (MT CO2e/yr) + 616,514.5770662 (MT CO2e/yr) = 694,508.875327 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 1,193,700.758271 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 63,337.7622339 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 1,193,700.758271 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 63,337.7622339 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 1,193,700.758271 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 1.1937008 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 1,193,700.758271 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 35.5722826 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 1,193,700.758271 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.1193701 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 1,193,700.758271 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 32.5880307 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 63,337.7622339 (MT CO2e/yr) + 35.5722826 (MT CO2e/yr) + 32.5880307 (MT CO2e/yr) = 63,405.9225472 (MT CO2e/yr)

6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens) 2035_H2-NG 10/15/2024

Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ 100%-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu) + PRJ Blend-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate (MMBtu/yr) - PRJ Overall H2 Heat Rate (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = NG CH4 EF (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens) 2035_H2-NG 10/15/2024

BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens) 2035_H2-NG 10/15/2024

PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/vr) = PRJ Overall H2 Heat Rate (MMBtu/vr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ 100%-H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ Blend-H2 Demand (MMBtu/yr) = Percent of annual hydrogen demand combusted as a blended fuel (sectorwide)

6-SoCal_PowerPeakerBaseload (MidModerate_ECOvens) 2035_H2-NG 10/15/2024

Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Power GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	0.00	MMBtu/100- MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1647
PRJ 100%-H2 Demand	17,893,609.49	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1648
PRJ Blend-H2 Demand	3,141,898.06	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1649
Blend % H2	26.58	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1650
Blend % NG	73.42	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	4.46	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	95.54	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	10.80	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)

Parameter	Value	Units	Resource
Blend % NG (Heat)	89.20	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	0.00	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf

Parameter	Value	Units	Resource
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	24,160.27	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NO2)	46.00	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrogen-dioxide
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane

Parameter	Value	Units	Resource
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	0.00	scf/yr	Calculated Below
PRJ H2 Vol	0.00	scf/yr	Calculated Below
PRJ NG Vol	0.00	scf/yr	Calculated Below
BSL NG Consumption	251525106.00	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1651
BSL Overall Heat Rate	0.00	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	0.00	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	0.00	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	0.00	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy

Parameter	Value	Units	Resource
			energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	0.00	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.05	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,414.68	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	0.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1652
O2 Correction	1.00	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.03	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.00	MT CO2/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1654

Parameter	Value	Units	Resource
NG CH4 EF	0.00	MT CH4/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1655
NG N2O EF	0.00	MT N2O/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV1656
Blend-NG CO2 EF	0.00	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.0000000	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.0000000	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000006	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000008	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	0.00	MT CO2e/yr	Calculated Below
BSL CH4	0.00	MT CO2e/yr	Calculated Below
BSL N2O	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG GHG	0.00	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ Blend-NG CO2	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	0.00	MT CO2e/yr	Calculated Below
Displaced CO2	0.00	MT CO2e/yr	Calculated Below
Displaced CH4	0.00	MT CO2e/yr	Calculated Below
Displaced N2O	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	0.00	MT CO2e/yr	Calculated Below
PRJ Overall CO2	0.00	MT CO2e/yr	Calculated Below
PRJ Overall CH4	0.00	MT CO2e/yr	Calculated Below
PRJ Overall N2O	0.00	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 251,525,106.0 (MMBtu/yr) x 0.0 (MMBtu/100-MMBtu) = 0.0 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 251,525,106.0 (MMBtu/yr) x 0.0 (MMBtu/100-MMBtu) = 0.0 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 17,893,609.4914102 (MMBtu/yr) x 0.0 (MMBtu/100-MMBtu) + 3,141,898.0625345 (MMBtu/yr) x 0.0 (MMBtu/100-MMBtu) = 0.0 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 0.0 (MMBtu/yr) - 0.0 (MMBtu/yr) = 0.0 (MMBtu/yr)

BSL NG Vol (scf/yr) = 0.0 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 0.0 (scf/yr)

PRJ NG Vol (scf/yr) = 0.0 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) \div 1,020.0 (Btu/scf) = 0.0 (scf/yr)

PRJ H2 Vol (scf/yr) = 0.0 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) \div 341.0 (Btu/scf) = 0.0 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) ÷ 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

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Fd Blend (scf/MMBtu) = 10.7980056 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 89.2019944 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,414.6798655 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 4.455663 (lb/100-lb) x 60,920.0 (Btu/lb) + 95.544337 (lb/100-lb) x 22,446.0 (Btu/lb) = 24,160.2717754 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.0 (MT CO2/MMBtu) x 1.0285458 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,414.6798655 (scf/MMBtu) = 0.0 (MT CO2/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = 0.0 (MT CH4/MMBtu) x 1.0285458 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,414.6798655 (scf/MMBtu) = 0.0 (MT CH4/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = 0.0 (MT N2O/MMBtu) x 1.0285458 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,414.6798655 (scf/MMBtu) = 0.0 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = 2.0 (ppm) \div 1,000,000.0 (scf-ppm/scf) \div 385.22 (scf/pmole) x 44.013 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 1.0 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000006 (MT/MMBtu)

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.0285458 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} x 44.013 \text{ (lb/pmole)} x 8,414.6798655 \text{ (scf/MMBtu)} x 1.0 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.0000008 \text{ (MT/MMBtu)}$

BSL CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

PRJ 100%-NG CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) \times 0.0 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

PRJ 100%-NG CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

PRJ 100%-NG N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ 100%-NG N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

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PRJ Blend-NG CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0000008 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000008 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0000006 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000006 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 0.0 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 0.0 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 0.0 (MT CH4/yr)

PRJ Overall N2O (MT N2O/yr) = 0.0 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 0.0 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

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Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ 100%-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu) + PRJ Blend-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate (MMBtu/yr) - PRJ Overall H2 Heat Rate (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = NG CH4 EF (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

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BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

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PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/vr) = PRJ Overall H2 Heat Rate (MMBtu/vr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ 100%-H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ Blend-H2 Demand (MMBtu/yr) = Percent of annual hydrogen demand combusted as a blended fuel (sectorwide)

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Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Power GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	0.16	MMBtu/100- MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5547
PRJ 100%-H2 Demand	5,200,073.80	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5548
PRJ Blend-H2 Demand	480,363.79	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5549
Blend % H2	17.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5550
Blend % NG	83.00	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	2.57	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	97.43	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	6.41	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)

Parameter	Value	Units	Resource
Blend % NG (Heat)	93.59	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	11,328.97	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf

Parameter	Value	Units	Resource
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	23,434.83	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NO2)	46.00	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrogen-dioxide
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane

Parameter	Value	Units	Resource
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	115,727,819.71	scf/yr	Calculated Below
PRJ H2 Vol	26,901,250.19	scf/yr	Calculated Below
PRJ NG Vol	106,734,362.54	scf/yr	Calculated Below
BSL NG Consumption	73095879.00	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5551
BSL Overall Heat Rate	118,042.38	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	118,042.38	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	8,397.59	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	775.74	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	9,173.33	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	97,540.08	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy

Parameter	Value	Units	Resource
			energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	11,328.97	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	108,869.05	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.05	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,534.73	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	15.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5552
O2 Correction	3.54	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.02	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5554

Parameter	Value	Units	Resource
NG CH4 EF	0.00	MT CH4/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5555
NG N2O EF	0.00	MT N2O/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5556
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.0000010	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.000001	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000022	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000031	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	6,263.33	MT CO2e/yr	Calculated Below
BSL CH4	3.52	MT CO2e/yr	Calculated Below
BSL N2O	3.22	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	5,175.48	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	2.91	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	2.66	MT CO2e/yr	Calculated Below
PRJ 100%-NG GHG	5,181.05	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ Blend-NG CO2	598.53	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	0.35	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	0.32	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	599.20	MT CO2e/yr	Calculated Below
Displaced CO2	486.74	MT CO2e/yr	Calculated Below
Displaced CH4	0.27	MT CO2e/yr	Calculated Below
Displaced N2O	0.25	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	0.65	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	5.03	MT CO2e/yr	Calculated Below
PRJ Overall CO2	5,774.01	MT CO2e/yr	Calculated Below
PRJ Overall CH4	3.26	MT CO2e/yr	Calculated Below
PRJ Overall N2O	8.67	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 73,095,879.0 (MMBtu/yr) x 0.1614898 (MMBtu/100-MMBtu) = 118,042.3761033 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 73,095,879.0 (MMBtu/yr) x 0.1614898 (MMBtu/100-MMBtu) = 118,042.3761033 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 5,200,073.802006 (MMBtu/yr) x 0.1614898 (MMBtu/100-MMBtu) + 480,363.7861503 (MMBtu/yr) x 0.1614898 (MMBtu/100-MMBtu) = 9,173.3263131 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 118,042.3761033 (MMBtu/yr) - 9,173.3263131 (MMBtu/yr) = 108,869.0497902 (MMBtu/yr)

BSL NG Vol (scf/yr) = 118,042.3761033 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 115,727,819.709129 (scf/yr)

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PRJ NG Vol (scf/yr) = 108,869.0497902 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 106,734,362.539388 (scf/yr)

PRJ H2 Vol (scf/yr) = 9,173.3263131 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 341.0 (Btu/scf) = 26,901,250.1851505 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) \div 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

Fd Blend (scf/MMBtu) = 6.4085698 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 93.5914302 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,534.7287714 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 2.5701327 (lb/100-lb) x 60,920.0 (Btu/lb) + 97.4298673 (lb/100-lb) x 22,446.0 (Btu/lb) = 23,434.8328574 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.01615 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,534.7287714 (scf/MMBtu) = 0.0528319 (MT CO2/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.01615 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,534.7287714 (scf/MMBtu) = 0.000001 (MT CH4/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.01615 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,534.7287714 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = 2.0 (ppm) \div 1,000,000.0 (scf-ppm/scf) \div 385.22 (scf/pmole) x 44.013 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 3.5423729 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000022 (MT/MMBtu)

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.01615 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)}$ x 44.013 (lb/pmole) x 8,534.7287714 (scf/MMBtu) x 3.5423729 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000031 (MT/MMBtu)

BSL CO2 (MT CO2/yr) = 118,042.3761033 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 6,263.328476 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 118,042.3761033 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 6,263.328476 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 118,042.3761033 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.1180424 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 118,042.3761033 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 3.5176628 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 118,042.3761033 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0118042 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 118,042.3761033 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 3.2225569 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 6,263.328476 (MT CO2e/yr) + 3.5176628 (MT CO2e/yr) + 3.2225569 (MT CO2e/yr) = 6,270.0686957 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 97,540.0838031 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 5,175.4768466 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 97,540.0838031 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 5,175.4768466 (MT CO2e/yr)

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PRJ 100%-NG CH4 (MT CH4/yr) = 97,540.0838031 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0975401 (MT CH4/yr)

PRJ 100%-NG CH4 (MT CO2e/yr) = 97,540.0838031 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 2.9066945 (MT CO2e/yr)

PRJ 100%-NG N2O (MT N2O/yr) = 97.540.0838031 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.009754 (MT N2O/yr)

PRJ 100%-NG N2O (MT CO2e/yr) = 97,540.0838031 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 2.6628443 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 5,175.4768466 (MT CO2e/yr) + 2.9066945 (MT CO2e/yr) + 2.6628443 (MT CO2e/yr) = 5,181.0463854 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 11,328.965987 (MMBtu/yr) x 0.0528319 (MT CO2/MMBtu) = 598.5313585 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 11,328.965987 (MMBtu/yr) x 0.0528319 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 598.5313585 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 11,328.965987 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0117483 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 11,328.965987 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.3501005 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 11,328.965987 (MMBtu/yr) x 0.00000001 (MT N2O/MMBtu) = 0.0011748 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 11,328.965987 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.3207297 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 598.5313585 (MT CO2e/yr) + 0.3501005 (MT CO2e/yr) + 0.3207297 (MT CO2e/yr) = 599.2021888 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 775.7384341 (MMBtu/yr) x 0.0000031 (MT N2O/MMBtu) = 0.0023919 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 775.7384341 (MMBtu/yr) x 0.0000031 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.6529767 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 8,397.5878791 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) = 0.0184198 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 8,397.5878791 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 5.0285935 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 5,175.4768466 (MT CO2e/yr) + 598.5313585 (MT CO2e/yr) = 5,774.0082051 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 2.9066945 (MT CO2e/yr) + 0.3501005 (MT CO2e/yr) = 3.256795 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = 0.6529767 (MT CO2e/yr) + 5.0285935 (MT CO2e/yr) + 0.3207297 (MT CO2e/yr) + 2.6628443 (MT CO2e/yr) = 8.6651442 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 5,774.0082051 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 5,774.0082051 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 3.256795 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 0.1092884 (MT CH4/yr)

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PRJ Overall N2O (MT N2O/yr) = 8.6651442 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 0.0317405 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 0.6529767 (MT CO2e/yr) + 5.0285935 (MT CO2e/yr) + 599.2021888 (MT CO2e/yr) + 5,181.0463854 (MT CO2e/yr) = 5,785.9301443 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 9,173.3263131 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 486.7366942 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 9,173.3263131 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 486.7366942 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 9,173.3263131 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0091733 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 9,173.3263131 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.2733651 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 9,173.3263131 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0009173 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 9,173.3263131 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.2504318 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 486.7366942 (MT CO2e/yr) + 0.2733651 (MT CO2e/yr) + 0.2504318 (MT CO2e/yr) = 487.2604911 (MT CO2e/yr)

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Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ 100%-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu) + PRJ Blend-H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate (MMBtu/yr) - PRJ Overall H2 Heat Rate (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = NG CH4 EF (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) x Fd Ng (scf/MMBtu) ÷ Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

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BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

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PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/vr) = PRJ Overall H2 Heat Rate (MMBtu/vr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ 100%-H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ Blend-H2 Demand (MMBtu/yr) = Percent of annual hydrogen demand combusted as a blended fuel (sectorwide)

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Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Power GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	99.01	MMBtu/100- MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5847
PRJ 100%-H2 Demand	5,200,073.80	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5848
PRJ Blend-H2 Demand	480,363.79	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5849
Blend % H2	17.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5850
Blend % NG	83.00	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	2.57	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	97.43	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	6.41	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)

Parameter	Value	Units	Resource
Blend % NG (Heat)	93.59	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	6,946,134.13	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf

Parameter	Value	Units	Resource
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	23,434.83	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NO2)	46.00	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrogen-dioxide
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane

Parameter	Value	Units	Resource
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	70,956,251,363.69	scf/yr	Calculated Below
PRJ H2 Vol	16,493,975,907.72	scf/yr	Calculated Below
PRJ NG Vol	65,442,088,829.83	scf/yr	Calculated Below
BSL NG Consumption	73095879.00	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5851
BSL Overall Heat Rate	72,375,376.39	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	72,375,376.39	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	5,148,816.92	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	475,628.86	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	5,624,445.78	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	59,804,796.48	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy

Parameter	Value	Units	Resource
			energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	6,946,134.13	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	66,750,930.61	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.05	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,534.73	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	15.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5852
O2 Correction	3.54	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.02	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5854

Parameter	Value	Units	Resource
NG CH4 EF	0.00	MT CH4/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5855
NG N2O EF	0.00	MT N2O/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AV5856
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.0000010	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.0000001	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000022	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000031	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	3,840,237.47	MT CO2e/yr	Calculated Below
BSL CH4	2,156.79	MT CO2e/yr	Calculated Below
BSL N2O	1,975.85	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	3,173,242.50	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	1,782.18	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	1,632.67	MT CO2e/yr	Calculated Below
PRJ 100%-NG GHG	3,176,657.35	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ Blend-NG CO2	366,977.81	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	214.66	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	196.65	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	367,389.11	MT CO2e/yr	Calculated Below
Displaced CO2	298,433.09	MT CO2e/yr	Calculated Below
Displaced CH4	167.61	MT CO2e/yr	Calculated Below
Displaced N2O	153.55	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	400.36	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	3,083.18	MT CO2e/yr	Calculated Below
PRJ Overall CO2	3,540,220.31	MT CO2e/yr	Calculated Below
PRJ Overall CH4	1,996.84	MT CO2e/yr	Calculated Below
PRJ Overall N2O	5,312.86	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 73,095,879.0 (MMBtu/yr) x 99.0143047 (MMBtu/100-MMBtu) = 72,375,376.3909596 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 73,095,879.0 (MMBtu/yr) x 99.0143047 (MMBtu/100-MMBtu) = 72,375,376.3909596 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 5,200,073.802006 (MMBtu/yr) x 99.0143047 (MMBtu/100-MMBtu) + 480,363.7861503 (MMBtu/yr) x 99.0143047 (MMBtu/100-MMBtu) = 5,624,445.7845314 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 72,375,376.3909596 (MMBtu/yr) - 5,624,445.7845314 (MMBtu/yr) = 66,750,930.6064283 (MMBtu/yr)

BSL NG Vol (scf/yr) = 72,375,376.3909596 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 70,956,251,363.6859 (scf/yr)

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PRJ NG Vol (scf/yr) = 66,750,930.6064283 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 65,442,088,829.8317 (scf/yr)

PRJ H2 Vol (scf/yr) = 5,624,445.7845314 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 341.0 (Btu/scf) = 16,493,975,907.7166 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) \div 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

Fd Blend (scf/MMBtu) = 6.4085698 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 93.5914302 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,534.7287714 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 2.5701327 (lb/100-lb) x 60,920.0 (Btu/lb) + 97.4298673 (lb/100-lb) x 22,446.0 (Btu/lb) = 23,434.8328574 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.01615 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,534.7287714 (scf/MMBtu) = 0.0528319 (MT CO2/MMBtu)

Blend-NG CH4 EF (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.01615 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,534.7287714 (scf/MMBtu) = 0.000001 (MT CH4/MMBtu)

Blend-NG N2O EF (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.01615 (ppm/ppm) x 8,710.0 (scf/MMBtu) ÷ 8,534.7287714 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} \times 44.013 \text{ (lb/pmole)} \times 5,975.0492449 \text{ (scf/MMBtu)} \times 3.5423729 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.0000022 \text{ (MT/MMBtu)}$

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.01615 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)}$ x 44.013 (lb/pmole) x 8,534.7287714 (scf/MMBtu) x 3.5423729 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000031 (MT/MMBtu)

BSL CO2 (MT CO2/yr) = 72,375,376.3909596 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 3,840,237.4713043 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 72,375,376.3909596 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 3,840,237.4713043 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 72,375,376.3909596 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 72.3753764 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 72,375,376.3909596 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 2,156.7862165 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 72,375,376.3909596 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 7.2375376 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 72,375,376.3909596 (MMBtu/yr) x 0.00000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 1,975.8477755 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 3,840,237.4713043 (MT CO2e/yr) + 2,156.7862165 (MT CO2e/yr) + 1,975.8477755 (MT CO2e/yr) = 3,844,370.1052962 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 59,804,796.4764686 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 3,173,242.5010414 (MT CO2/yr)

20-SoCal_PowerCogeneration (MidModerate_ICTurbines) 2035_H2-NG 10/15/2024

PRJ 100%-NG CO2 (MT CO2e/yr) = 59,804,796.4764686 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 3,173,242.5010414 (MT CO2e/yr)

PRJ 100%-NG CH4 (MT CH4/yr) = 59.804,796.4764686 (MMBtu/yr) x 0.0000001 (MT CH4/MMBtu) = 59.8047965 (MT CH4/yr)

PRJ 100%-NG CH4 (MT CO2e/yr) = 59,804,796.4764686 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 1,782.182935 (MT CO2e/yr)

PRJ 100%-NG N2O (MT N2O/yr) = 59,804,796.4764686 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 5.9804796 (MT N2O/yr)

PRJ 100%-NG N2O (MT CO2e/yr) = 59,804,796.4764686 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 1,632.6709438 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 3,173,242.5010414 (MT CO2e/yr) + 1,782.182935 (MT CO2e/yr) + 1,632.6709438 (MT CO2e/yr) = 3,176,657.3549202 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 6,946,134.1299597 (MMBtu/yr) x 0.0528319 (MT CO2/MMBtu) = 366,977.8073418 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 6.946,134.1299597 (MMBtu/yr) x 0.0528319 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 366,977.8073418 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 6.946,134.1299597 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 7.2032654 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 6,946,134.1299597 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 214.6573096 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 6,946,134.1299597 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.7203265 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 6,946,134.1299597 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 196.649146 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 366,977.8073418 (MT CO2e/yr) + 214.6573096 (MT CO2e/yr) + 196.649146 (MT CO2e/yr) = 367,389.1137974 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 475,628.8631157 (MMBtu/yr) x 0.0000031 (MT N2O/MMBtu) = 1.4665198 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 475,628.8631157 (MMBtu/yr) x 0.0000031 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 400.3599002 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 5,148,816.9214156 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) = 11.2937137 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 5,148,816.9214156 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 3,083.183831 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 3,173,242.5010414 (MT CO2e/yr) + 366,977.8073418 (MT CO2e/yr) = 3,540,220.3083832 (MT CO2e/yr)

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PRJ Overall CH4 (MT CO2e/yr) = 1,782.182935 (MT CO2e/yr) + 214.6573096 (MT CO2e/yr) = 1,996.8402446 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = 400.3599002 (MT CO2e/yr) + 3,083.183831 (MT CO2e/yr) + 196.649146 (MT CO2e/yr) + 1,632.6709438 (MT CO2e/yr) = 5,312.8638211 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 3,540,220.3083832 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 3,540,220.3083832 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 1,996.8402446 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 67.0080619 (MT CH4/yr)

PRJ Overall N2O (MT N2O/yr) = 5,312.8638211 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 19.4610396 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 400.3599002 (MT CO2e/yr) + 3,083.183831 (MT CO2e/yr) + 367,389.1137974 (MT CO2e/yr) + 3,176,657.3549202 (MT CO2e/yr) = 3,547,530.0124489 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 5,624,445.7845314 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 298,433.0933272 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 5,624,445.7845314 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 298,433.0933272 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 5,624,445.7845314 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 5.6244458 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 5,624,445.7845314 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 167.6084844 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 5,624,445.7845314 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.5624446 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 5,624,445.7845314 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 153.5473699 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 298,433.0933272 (MT CO2e/yr) + 167.6084844 (MT CO2e/yr) + 153.5473699 (MT CO2e/yr) = 298,754.2491815 (MT CO2e/yr)

Appendix C.4: Hard to Electrify Industrial

GHG Results, Calculations, and Data

	A	С	D	Е	F
1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
97	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT94
98	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT95
99	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT96
100	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT97
101	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	119920546.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT98
102	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT99
104	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT101
105	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT102
106	1-SoCal_Refineries (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT103
107	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT104
108	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT105
109	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT106
110	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT107
	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT108
112	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT109
114	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT111
115	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT112
116	1-SoCal_Refineries (LowConservative_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT113
117	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT114
118	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT115
119	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT116
120	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT117
121	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT118
122	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT119
124	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT121
125	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT122
126	1-SoCal_Refineries (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT123
127	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT124
128	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT125
129	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT126
130	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT127
131	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT128
132	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT129
134	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT131
135	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT132
136	1-SoCal_Refineries (LowConservative_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT133
137	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT134
138	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT135
139	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT136
140	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT137
141	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT138
142	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT139

	A	С	D	E	F
1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
144	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT141
145	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT142
146	1-SoCal_Refineries (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT143
147	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT144
148	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT145
149	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT146
150	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT147
151	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT148
152	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT149
154	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT151
155	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT152
156	1-SoCal_Refineries (LowConservative_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT153
157	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT154
158	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT155
159	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT156
160	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT157
161	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT158
162	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT159
164	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT161
165	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT162
166	1-SoCal_Refineries (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT163
167	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT164
168	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT165
169	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT166
170	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT167
	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT168
172	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT169
174	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT171
175	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT172
176	1-SoCal_Refineries (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT173
177	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT174
178	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT175
179	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT176
180	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT177
181	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT178
182	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT179
184	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	NG CUA EE (MT CUA (MARREW)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT181
185	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT182
186	1-SoCal_Refineries (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT183
187	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT184
188	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT185
189	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT186

	A	С	D	Е	F
1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenaric	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
190	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT187
191	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	111406870.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT188
192	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT189
194	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT191
195	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT192
196	1-SoCal_Refineries (LowConservative_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT193
197	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT194
198	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT195
199	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT196
200	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT197
201	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT198
202	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT199
204	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT201
205	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT202
206	1-SoCal_Refineries (LowConservative_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT203
207	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT204
208	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT205
209	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT206
210	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT207
211	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT208
212	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT209
	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT211
215	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT212
216	1-SoCal_Refineries (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT213
217	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT214
	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT215
219	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT216
220	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT217
221	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT218
222	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT219
224	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	NG CHA EE (MT CHA (MARPHI)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT221
225	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT222
226	1-SoCal_Refineries (LowConservative_ECGeneral)	2042_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughout Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT223
227	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT224
228	1-SoCal_Refineries (LowConservative_ECGeneral) 1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (set/100-set)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT225
229		2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT226
	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT227
231	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100_scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT228
232	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT229
234	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT231
235	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT232
236	1-SoCal_Refineries (LowConservative_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT233

	A	С	D	E	F
1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
237	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT234
238	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT235
239	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT236
240	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT237
241	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	107202151.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT238
242	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT239
244	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT241
245	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT242
246	1-SoCal_Refineries (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT243
247	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT244
248	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT245
249	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT246
250	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT247
251	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT248
252	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT249
254	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT251
255	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT252
256	1-SoCal_Refineries (LowConservative_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT253
397	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT394
398	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT395
399	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT396
400	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT397
401	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT398
402	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT399
	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT401
	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT402
406	2-SoCal_Refineries (LowConservative_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT403
407	2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT404
408	2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT405
409	2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT406
410	2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMPtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT407 ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT408
411	2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT408
412	2-SoCal_Refineries (LowConservative_ECOvens) 2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT409 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT411
	-	2031_H2-NG	NG CH4 FE (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT411
415	2-SoCal_Refineries (LowConservative_ECOvens) 2-SoCal_Refineries (LowConservative_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT412 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT413
416		2031_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT413 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT414
417	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRI H2 Demand (MMBtu/vr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT414 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT415
418	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT415 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT416
419	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT416 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT417
420	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMPtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT417 ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT418
	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT418
422	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT419

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tal	function in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
424	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT421
425	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT422
426	2-SoCal_Refineries (LowConservative_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT423
427	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT424
428	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT425
429	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT426
430	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT427
	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT428
	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT429
	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT431
435	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT432
	2-SoCal_Refineries (LowConservative_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT433
	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT434
438	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT435
439	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT436
440	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT437
441	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT438
442	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT439
444	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG	NG COLA FF (MT COLA (MANDE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT441
445 446	2-SoCal_Refineries (LowConservative_ECOvens) 2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT442 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT443
447	2-SoCal_Refineries (LowConservative_ECOvens)	2034_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT444 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT444
448	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT445
449	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT445 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT446
	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT447
	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT448
452	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT449
454	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT451
455	2-SoCal Refineries (LowConservative ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT452
456	2-SoCal_Refineries (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT453
457	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT454
458	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT455
459	2-SoCal_Refineries (LowConservative_ECOvens)	_ 2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT456
460	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT457
461	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT458
462	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT459
464	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT461
465	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT462
466	2-SoCal_Refineries (LowConservative_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT463
467	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT464
468	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT465
469	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT466
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
470	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT467
471	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	114419638.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT468
472	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT469
474	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT471
	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT472
	2-SoCal_Refineries (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT473
477	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT474
478	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT475
479	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT476
480	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT477
481	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT478
482	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT479
484	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT481
485	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT482
486	2-SoCal_Refineries (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT483
487	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT484
488	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT485
489	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT486
490	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT487
	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT488
492	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT489
	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT491
495	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT492
496	2-SoCal_Refineries (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT493
	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT494
	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT495
499	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT496
500	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT497
501	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT498
502	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG	· • ·		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT499
504	2-SoCal_Refineries (LowConservative_ECOvens) 2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG 2040_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT501 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT502
506	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG 2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT503
507	2-SoCal_Refineries (LowConservative_ECOvens)	2040_H2-NG 2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT503 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT504
508	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT505
509	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT505 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT506
510	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT507 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT507
511	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT507 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT508
512	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT508 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT509
514	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT519 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT511
515	2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT511 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT512
	2-SoCal_Refineries (LowConservative_ECOvens) 2-SoCal_Refineries (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT512 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT513
210	2 30Car_hermenes (Lowconservative_ECOVEIIS)	7041_11Z-1NG	INO INZO LI (IVIT INZO/IVIIVIDIU)	0.00	ALI 1_0110_111003LF0W_3_DataF1EP_30CalOas.AlsA, 1. Data_F1EP_111003LFlaf, Cell A1313

	А	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep Industrial" tak	o. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
517	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT514
518	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT515
519	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT516
520	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT517
521	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	107937336.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT518
522	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT519
524	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT521
525	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT522
526	2-SoCal_Refineries (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT523
527	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT524
528	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT525
<u> </u>	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT526
530	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT527
531	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	107879260.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT528
532	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT529
534	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT531
535	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT532
536	2-SoCal_Refineries (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT533
537	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT534
	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT535
539	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT536
540	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT537
	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT538
542	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT539
	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT541
545	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT542
546	2-SoCal_Refineries (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT543
547	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT544
548	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT545
549	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT546
550	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT547
551	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT548
552	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT549
554	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT551
555	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT552
556	2-SoCal_Refineries (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT553
697	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT694
698	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT695
699	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT696
700	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT697
701	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT698
702	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT699

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pi	rep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	servative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
704	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT701
705	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT702
706	3-SoCal_Refineries (LowConservative_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT703
707	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT704
708	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT705
709	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT706
710	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT707
711	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	119578262.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT708
712	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT709
714	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT711
715	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT712
	3-SoCal_Refineries (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT713
	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT714
718	-	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT715
719	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT716
720	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT717
721	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT718
722	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT719
724	_ ` ` `	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT721
725	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT722
726	3-SoCal_Refineries (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT723
	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT724
	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT725
729	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT726
730	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT727
731	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT728
732	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT729
734	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT731
735	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT732
736	3-SoCal_Refineries (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT733
737	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT734
738	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT735
739	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT736
740	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT737
741	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT738
742	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT739
744	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT741
745	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT742
746	3-SoCal_Refineries (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT743
747	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT744
748	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT745
749	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT746

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tak			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	oond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
750	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT747
751	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	115656653.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT748
752	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT749
754	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT751
755	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT752
756	3-SoCal_Refineries (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT753
757	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT754
	_ ` _ ` ,	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT755
759	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT756
760	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT757
761	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	111406622.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT758
	`	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT759
	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT761
765	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT762
766	3-SoCal_Refineries (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT763
767	3-SoCal_Refineries (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT764
768	3-SoCal_Refineries (LowConservative_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT765
769	3-SoCal_Refineries (LowConservative_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT766
770	3-SoCal_Refineries (LowConservative_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT767
	3-SoCal_Refineries (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT768
	`	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT769
	3-SoCal_Refineries (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT771
	_ ` _ ` ,	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT772
	`	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT773
	` '	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT774
778	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT775
779	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT776
780	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT777
781	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT778
782	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT779
784	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT781
785	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT782
786	3-SoCal_Refineries (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT784
787	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT784
700	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ 9/ Overall H3 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT785
789	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT786
790	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT787
791	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT788
792	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT789
	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT791
		2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT792
796	3-SoCal_Refineries (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT793

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Conse	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
797	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT794
798	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT795
799	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT796
800	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT797
801	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	110759064.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT798
802	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT799
	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT801
	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT802
	3-SoCal_Refineries (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT803
807	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT804
—	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT805
809	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT806
	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT807
	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT808
	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT809
814	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT811
	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT812
	3-SoCal_Refineries (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT813
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT814
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT815
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT816
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT817
_	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT818
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT819
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT821
	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT822
826	3-SoCal_Refineries (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT823
827	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT824
	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT825
	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT826
	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT827
	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (ccf/100 ccf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT828
	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT829 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT831
	3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT831
835	3-SoCal_Refineries (LowConservative_ICEngines) 3-SoCal_Refineries (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT832
836	-	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT833 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT834
	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT834
	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT835
839	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT836 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT837
040	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT837
841	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT838
842	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT839

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2	Tab Contents		· · · · · · · · · · · · · · · · · · ·		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	ep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	servative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
844	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT841
845	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT842
846	3-SoCal_Refineries (LowConservative_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT843
847	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT844
848	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT845
849	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT846
	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT847
	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT848
	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT849
	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT851
	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT852
	3-SoCal_Refineries (LowConservative_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT853
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT994
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT995
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT996
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT997
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT998
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT999
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1001
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1002
	4-SoCal_Refineries (LowConservative_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1003
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1004
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1005
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1006
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1007
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1008
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1009
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1011
	4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1012
	4-SoCal_Refineries (LowConservative_ICTurbines) 4-SoCal_Refineries (LowConservative_ICTurbines)	2031_H2-NG 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1013 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1014
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1014 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1015
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1015 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1016
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1017
	4-SoCal Refineries (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1017 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1018
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1019
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1021
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1022
	4-SoCal_Refineries (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1023
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1024
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1025
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1026
1023	1- 30001 Nermenes (Edwediscryddive_lerdruinies)	2033_112-110	Tho to Overall the as bietha (self 100-self)	00.00	7.E. 1_G.1.G_industriow_5_butti 1-p_50-cardus.xisx, 1. butti_i 1-ep_industrial, Cell Al 1020

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tak	nction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1027
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1028
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1029
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1031
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1032
	4-SoCal_Refineries (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1033
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1034
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1035
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1036
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1037
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1038
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1039
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1041
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1042
	4-SoCal_Refineries (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1043
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1044
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1045
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1046
	4-SoCal_Refineries (LowConservative_ICTurbines) 4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1047
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1048 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1049
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1049 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1051
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1051 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1052
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1053 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1053
	4-SoCal_Refineries (LowConservative_ICTurbines)	2035_H2 NG 2036 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1054
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1055
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1056
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1057
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1058
	4-SoCal Refineries (LowConservative ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1059
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1061
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1062
	4-SoCal_Refineries (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1063
	4-SoCal_Refineries (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1064
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1065
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1066
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1067
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1068
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1069
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1071
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1072
	4-SoCal_Refineries (LowConservative_ICTurbines)	_ 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1073
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1077	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1074
1078	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1075
1079	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1076
1080	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1077
1081	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	112756225.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1078
1082	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1079
1084	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1081
1085	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1082
1086	4-SoCal_Refineries (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1083
1087	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1084
1088	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1085
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1086
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1087
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1088
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1089
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1091
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1092
	4-SoCal_Refineries (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1093
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1094
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1095
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1096
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1097
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1098
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1099
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1101
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1102
	4-SoCal_Refineries (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1103
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1104
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1105
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1106
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1107
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1108
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1109
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1111
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1112
	4-SoCal_Refineries (LowConservative_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1113
	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1114
	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1115
	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1116
	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1117
	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1118
1122	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1119

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1124	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1121
1125	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1122
1126	4-SoCal_Refineries (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1123
1127	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1124
1128	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1125
1129	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1126
1130	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1127
	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	107879260.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1128
	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1129
	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1131
	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1132
	4-SoCal_Refineries (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1133
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1134
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1135
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1136
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1137
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1138
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1139
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1141
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1142
	4-SoCal_Refineries (LowConservative_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1143
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1144
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1145
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1146
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1147
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1148
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1149
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1151
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1152
	4-SoCal_Refineries (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1153
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1294
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1295
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1296
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1297
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1298
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1299
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1301
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1302
	5-SoCal_Refineries (MidModerate_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1303
	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1304
	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1305
1309	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	/6.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1306

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2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenario	S.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1310	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1307
	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	119578262.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1308
1312	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1309
1314	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1311
1315	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1312
1316	5-SoCal_Refineries (MidModerate_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1313
1317	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1314
1318	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1315
1319	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1316
1320	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1317
1321	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	118220721.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1318
	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1319
1324	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1321
1325	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1322
1326	5-SoCal_Refineries (MidModerate_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1323
1327	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1324
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1325
1329	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1326
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1327
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1328
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1329
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1331
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1332
	5-SoCal_Refineries (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1333
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1334
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1335
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1336
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1337
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1338
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1339
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1341
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1342
	5-SoCal_Refineries (MidModerate_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1343
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1344
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1345
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1346
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1347
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1348
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1349
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1351
	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1352
1356	5-SoCal_Refineries (MidModerate_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1353

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	The input data in this tab was processed through the fu	inction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1357	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1354
1358	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1355
1359	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1356
1360	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1357
1361	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	111406622.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1358
1362	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1359
1364	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1361
1365	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1362
1366	5-SoCal_Refineries (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1363
1367	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1364
1368	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1365
1369	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1366
1370	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1367
1371	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	114419638.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1368
1372	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1369
1374	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1371
1375	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1372
1376	5-SoCal_Refineries (MidModerate_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1373
1377	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1374
1378	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1375
1379	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1376
1380	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1377
1381	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	112756225.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1378
	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1379
1384	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1381
1385	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1382
	5-SoCal_Refineries (MidModerate_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1383
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1384
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1385
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1386
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1387
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1388
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1389
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1391
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1392
	5-SoCal_Refineries (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1393
	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1394
	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1395
	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1396
	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1397
	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1398
1402	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1399

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5				•	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1404	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1401
1405	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1402
1406	5-SoCal_Refineries (MidModerate_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1403
1407	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1404
1408	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1405
1409	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1406
1410	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1407
1411	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	108931199.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1408
	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1409
	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1411
	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1412
	5-SoCal_Refineries (MidModerate_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1413
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1414
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1415
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1416
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1417
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1418
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1419
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1421
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1422
	5-SoCal_Refineries (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1423
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1424
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1425
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1426
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1427
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1428
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1429
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1431
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1432
	5-SoCal_Refineries (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1433
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1434
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1435
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1436
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1437
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1438
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1439
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 FE (MT CH4/MMR+u)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1441
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1442
	5-SoCal_Refineries (MidModerate_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1443
	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1444
	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1445
1449	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1446

	A	С	D	E	F
1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1450	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1447
1451	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	106708338.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1448
1452	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1449
1454	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1451
1455	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1452
1456	5-SoCal_Refineries (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1453
1597	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1594
1598	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1595
1599	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1596
1600	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1597
	- ` `	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	119920546.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1598
	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1599
1604	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1601
	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1602
	6-SoCal_Refineries (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1603
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1604
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1605
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1606
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1607
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1608
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1609
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1611
<u> </u>	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1612
	6-SoCal_Refineries (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1613
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1614
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1615
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1616
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1617
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1618
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1619
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	NG CUA EE (MT CUA (MARREW)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1621
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1622
	6-SoCal_Refineries (MidModerate_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1623
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1624
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1625
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1626
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1627
1631	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1628
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1629
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	NG CUA EE (MT CUA (MARREW)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1631
	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1632
1636	6-SoCal_Refineries (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1633

	А	С	D	E	F		
1		_					
2	Tab Contents						
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the function in "3.1 EQ						
3	Industrial GHG Calc" to produce the results in "4. Calculations".						
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse					
5							
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
1637	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1634		
1638	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1635		
1639	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1636		
1640	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1637		
1641	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	117046363.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1638		
1642	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1639		
1644	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1641		
1645	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1642		
1646	6-SoCal_Refineries (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1643		
1647	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1644		
1648	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1645		
	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1646		
1650	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1647		
	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	115656653.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1648		
1652	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1649		
1654	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1651		
	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1652		
	6-SoCal_Refineries (MidModerate_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1653		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1654		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1655		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1656		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1657		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1658		
<u> </u>	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1659		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1661		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1662		
	6-SoCal_Refineries (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1663		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1664		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1665		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1666		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1667		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1668		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1669		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1671		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1672		
	6-SoCal_Refineries (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1673		
	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1674		
	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1675		
	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1676		
	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1677		
	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1678		
1682	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1679		

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1		<u> </u>					
2	Tab Contents						
	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the function in "3.1 EQ						
3	Industrial GHG Calc" to produce the results in "4. Calculation	ns".					
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons					
5					•		
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
1684	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1681		
1685	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1682		
1686	6-SoCal_Refineries (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1683		
1687	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1684		
1688	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1685		
1689	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1686		
1690	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1687		
1691	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	111406870.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1688		
1692	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1689		
1694	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1691		
1695	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1692		
1696	6-SoCal_Refineries (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1693		
1697	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1694		
1698	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1695		
1699	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1696		
1700	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1697		
1701	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	110759064.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1698		
	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1699		
	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1701		
	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1702		
	6-SoCal_Refineries (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1703		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1704		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1705		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1706		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1707		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1708		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1709		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1711		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1712		
	6-SoCal_Refineries (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1713		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1714		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1715		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1716		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1717		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1718		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1719		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1721		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1722		
	6-SoCal_Refineries (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1723		
	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1724		
	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1725		
1729	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1726		

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2	Tab Contents						
	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the function in "3.1 EQ						
3	Industrial GHG Calc" to produce the results in "4. Calculations		· · · · · · · · · · · · · · · · · · ·				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.			
5							
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
1730	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1727		
1731	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	107879260.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1728		
1732	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1729		
1734	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1731		
1735	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1732		
1736	6-SoCal_Refineries (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1733		
1737	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1734		
1738	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1735		
1739	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1736		
1740	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1737		
1741	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	107202151.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1738		
1742	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1739		
1744	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1741		
1745	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1742		
1746	6-SoCal_Refineries (MidModerate_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1743		
1747	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1744		
1748	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1745		
1749	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1746		
	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1747		
	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	106708338.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1748		
	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1749		
1754	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1751		
	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1752		
	6-SoCal_Refineries (MidModerate_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1753		
	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1894		
1898	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1895		
	,	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1896		
1900	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1897		
1901	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1898		
1902	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1899		
1904	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1901		
1905	7-SoCal_Refineries (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1902		
1906	` /	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1903		
1907	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1904		
1908	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1905		
	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1906		
	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1907		
	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1908		
	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1909		
	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1911		
	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1912		
1916	7-SoCal_Refineries (MidModerate_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1913		

	A	C	D	E	F F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_I	Prep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculatio	ns".			
4	In this workbook, the terms "Low", "Mid", and "High" corre	spond to the "Cons			
5		-			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1917	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1914
1918	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1915
1919	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1916
1920	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1917
1921	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	118220721.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1918
1922	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1919
1924	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1921
1925	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1922
1926	7-SoCal_Refineries (MidModerate_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1923
1927	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1924
1928	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1925
1929	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1926
1930	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1927
1931	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	117596313.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1928
1932	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1929
1934	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1931
1935	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1932
1936	7-SoCal_Refineries (MidModerate_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1933
1937	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1934
1938	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1935
1939	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1936
1940	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1937
1941	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	117046363.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1938
1942	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1939
1944	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1941
1945	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1942
1946	7-SoCal_Refineries (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1943
1947	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1944
1948	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1945
1949	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1946
1950	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1947
1951	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	115656653.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1948
1952	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1949
1954	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1951
1955	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1952
1956	7-SoCal_Refineries (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1953
1957	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1954
1958	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1955
1959	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1956
1960	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1957
1961	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	111406622.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1958
1962	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1959

	А	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_F	Prep_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculatio	ns".			
4	In this workbook, the terms "Low", "Mid", and "High" corre	spond to the "Cons			
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1964	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1961
1965	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1962
1966	7-SoCal_Refineries (MidModerate_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1963
1967	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1964
	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1965
1969	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1966
	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1967
	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1968
	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1969
	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1971
	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1972
-	7-SoCal_Refineries (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1973
_	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1974
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1975
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1976
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1977
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1978
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1979
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1981
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1982
	7-SoCal_Refineries (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1983
	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1984
-	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1985
	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1986
	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1987
	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1988
	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1989
1994	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG	NG COLA FF (MT COLA (MANABELL)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1991
1995 1996	7-SoCal_Refineries (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT1992
	7-SoCal_Refineries (MidModerate_ICEngines)				ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT1993
	7-SoCal_Refineries (MidModerate_ICEngines) 7-SoCal Refineries (MidModerate ICEngines)	2040_H2-NG 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1994 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1995
	7-SoCal_Refineries (MidModerate_ICEngines) 7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG 2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1995 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1996
	7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT1997 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT1997
2001	7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1998
2001	7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG 2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1999 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT1999
	7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT2001
2004	7-SoCal_Refineries (MidModerate_ICEngines) 7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT2001 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT2002
	7-SoCal_Refineries (MidModerate_ICEngines) 7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG 2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2002 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2003
2007	7-SoCal_Refineries (MidModerate_ICEngines) 7-SoCal_Refineries (MidModerate_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT2004 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT2004
	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2005
	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2006 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2006
2003	1/ 30Cal_Iverilleries (ivilationer are_icritaliles)	7041_112-11Q	This to overall the as bletta (SC)/ 100-SC)	30.00	ALI I_GITG_ITIGUSTITOW_3_DatarTep_30calGas.AlsX, 1. Data_rTep_ITIGUSTITAI, Cell A12000

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1			•		
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2010	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2007
	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	108931199.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2008
2012	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2009
2014	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2011
2015	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2012
2016	7-SoCal_Refineries (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2013
2017	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2014
2018	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2015
2019	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2016
2020	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2017
2021	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	107937336.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2018
2022	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2019
2024	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2021
2025	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2022
2026	7-SoCal_Refineries (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2023
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2024
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2025
2029	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2026
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2027
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2028
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2029
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2031
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2032
	7-SoCal_Refineries (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2033
	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2034
	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2035
	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2036
2040	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2037
2041	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2038
2042	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2039
	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2041
	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2042
	7-SoCal_Refineries (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2043
	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2044
	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2045
	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2046
	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2047
	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2048
—	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2049
2054	`	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2051
	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2052
2056	7-SoCal_Refineries (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2053

	A	С	D	E	F		
1							
2	Tab Contents						
	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the function in "3.1 EQ						
3	Industrial GHG Calc" to produce the results in "4. Calculations	".					
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.			
5							
6	Equipment ID	Fuel Type	Parameter	Value	Reference		
2197	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2194		
2198	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2195		
2199	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2196		
2200	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2197		
2201	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	119920546.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2198		
2202	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2199		
2204	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2201		
2205	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2202		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2203		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2204		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2205		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2206		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2207		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2208		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2209		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2211		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2212		
_	8-SoCal_Refineries (MidModerate_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2213		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2214		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2215		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2216		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2217		
_	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2218		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2219		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2221		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2222		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2223		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2224		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2225		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2226		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2227		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2228		
	8-SoCal_Refineries (MidModerate_ICTurbines) 8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT2229		
	_ · · · · · · · · · · · · · · · · · · ·	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2231		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT2232		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT2233		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT2234		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Rlend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2235 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT2236		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2236 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT2237		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2237		
	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2238		
2242	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2239		

	А	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tak			
3	Industrial GHG Calc" to produce the results in "4. Calculation	าร".			
4	In this workbook, the terms "Low", "Mid", and "High" corre	spond to the "Cons			
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2244	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2241
2245	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2242
2246	8-SoCal_Refineries (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2243
2247	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2244
2248	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2245
2249	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2246
2250	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2247
2251	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	115656653.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2248
2252	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2249
	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2251
	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2252
	8-SoCal_Refineries (MidModerate_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2253
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2254
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2255
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2256
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2257
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2258
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2259
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2261
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2262
	8-SoCal_Refineries (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2263
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2264
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2265
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2266
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2267
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2268
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2269
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2271
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2272
	8-SoCal_Refineries (MidModerate_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2273
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2274
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2275
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2276
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2277
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2278
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2279
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2281
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2282
	8-SoCal_Refineries (MidModerate_ICTurbines)	2038_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2283
	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2284
	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2285
2289	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2286

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	nction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2290	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2287
	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	111406870.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2288
2292	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2289
	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2291
<u> </u>	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2292
	8-SoCal_Refineries (MidModerate_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2293
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2294
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2295
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2296
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2297
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2298
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2299
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2301
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2302
	8-SoCal_Refineries (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2303
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2304
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2305
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2306
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2307
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2308
	8-SoCal_Refineries (MidModerate_ICTurbines) 8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2309 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2311
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2312 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2312
	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2313 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2313
_	8-SoCal_Refineries (MidModerate_ICTurbines)	2041_H2-NG 2042 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2314
_	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2315
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2316
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2317
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2318
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2319
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2321
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2322
	8-SoCal_Refineries (MidModerate_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2323
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2324
	8-SoCal Refineries (MidModerate ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2325
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2326
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2327
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2328
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2329
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2331
	8-SoCal_Refineries (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2332
	8-SoCal Refineries (MidModerate ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2333
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation:	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2337	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2334
2338	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2335
	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2336
2340	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2337
2341	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	107202151.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2338
2342	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2339
2344	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2341
2345	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2342
	8-SoCal_Refineries (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2343
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2344
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2345
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2346
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2347
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2348
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2349
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2351
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2352
	8-SoCal_Refineries (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2353
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2494
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2495
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2496
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2497
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2498
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2499
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2501
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2502
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2503
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2504
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2505
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2506
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2507
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2508
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2509
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2511
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2512
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2513
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2514
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2515
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2516
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2517
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2518
2522	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2519

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep Industrial" tak	o. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation				
4	In this workbook, the terms "Low", "Mid", and "High" corres		ervative", "Moderate", and "Ambitious" market scenario	S.	
5	, , , , , ,		· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2524	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2521
2525	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2522
2526	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2523
2527	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2524
2528	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	19986972.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2525
2529	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2526
2530	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2527
2531	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	117596313.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2528
2532	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2529
2534	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2531
2535	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2532
2536	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2533
2537	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2534
2538	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	21797159.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2535
2539	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2536
2540	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2537
2541	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	117046363.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2538
2542	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2539
2544	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2541
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2542
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2543
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2544
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2545
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2546
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2547
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2548
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2549
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2551
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2552
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2553
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2554
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2555
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2556
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2557
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2558
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2559
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2561
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2562
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2563
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2564
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2565
2569	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2566

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_	p_Industrial" tab	. The input data in this tab was processed through the fo	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	' .			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5				<u>,</u>	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2570	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2567
2571	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	114419638.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2568
2572	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2569
2574	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2571
2575	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2572
2576	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2573
2577	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2574
2578	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	27461405.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2575
2579	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2576
2580	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2577
2581	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	112756225.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2578
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2579
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2581
2585	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2582
2586	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2583
2587	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2584
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	28534687.99	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2585
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2586
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2587
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2588
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2589
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2591
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2592
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2593
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2594
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2595
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2596
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2597
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2598
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2599
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2601
_	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2602
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2603
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2604
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2605
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2606
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2607
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2608
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2609
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2611
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2612
2616	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2613

	А	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tak	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2617	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	21.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2614
2618	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	31563170.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2615
2619	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2616
2620	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2617
2621	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	107937336.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2618
2622	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2619
2624	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2621
2625	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2622
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2623
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2624
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2625
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2626
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2627
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2628
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2629
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2631
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2632
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2633
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2634
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2635
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2636
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2637
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2638
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2639
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2641
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2642
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2643
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2644
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT2645
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2646 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2647
	9-SoCal_Refineries (HighAmbitious_ECGeneral) 9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2647 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2648
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG 2045_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2649 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2649
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2649 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2651
	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2652
_	9-SoCal_Refineries (HighAmbitious_ECGeneral)	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2653 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2653
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2794
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2794 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2795
2799	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2795 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2796
2800	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2797 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2797
2801	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2798 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2798
	10-SoCal_Refineries (HighAmbitious_ECOvens)	-	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2798 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2799
2002	TTO-200001 Veninenes (Highwinninons Ecovens)	2030_H2-NG	02 FETCETT (3CJ/ 100-3CJ)	0.00	ALT 1_GITG_ITIGUSTEOW_3_DataFTEP_SOCalGas.AlsX, 1. Data_FTEP_ITIGUSTITAL, Cell A12799

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep Industrial" tak	o. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation				
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	1
5		•	·	-	1
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2804	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2801
2805	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2802
2806	10-SoCal_Refineries (HighAmbitious_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2803
2807	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2804
2808	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	16121807.72	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2805
2809	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2806
2810	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2807
2811	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	119578262.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2808
2812	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2809
2814	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2811
2815	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2812
2816	10-SoCal_Refineries (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2813
2817	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2814
2818	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	18069173.76	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2815
2819	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2816
2820	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2817
2821	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	118220721.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2818
2822	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2819
2824	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2821
2825	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2822
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2823
2827	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2824
2828	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	19986972.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2825
	,	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2826
2830	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2827
2831	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	117596313.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2828
2832	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2829
2834	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2831
2835	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2832
2836	10-SoCal_Refineries (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2833
2837	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2834
2838	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2835
2839	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2836
2840	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2837
2841	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2838
2842	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2839
2844	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2841
2845	10-SoCal_Refineries (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2842
2846	4 – · · · · – · ·	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2843
2847	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2844
2848	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2845
2849	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2846

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tak	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		-			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2850	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2847
2851	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	115656653.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2848
2852	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2849
2854	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2851
2855	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2852
2856	10-SoCal_Refineries (HighAmbitious_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2853
2857	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2854
2858	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	24103493.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2855
2859	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2856
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2857
2861	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	111406622.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2858
2862	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2859
		2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2861
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2862
2866	10-SoCal_Refineries (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2863
2867	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2864
2868	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	26350860.63	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2865
		2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2866
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2867
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2868
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2869
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2871
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2872
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2873
	- · · · · · · · · · · · · · · · · · · ·	2038_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2874
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2875
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2876
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2877
2881	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2878
2882	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2879
2884	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2881
2885	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2882
2886	10-SoCal_Refineries (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2883
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2884
2888	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2885
2889	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2886
2890	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2887
2891	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2888
2892	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2889
2894	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2891
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2892
2896	10-SoCal_Refineries (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2893

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2897	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2894
2898	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	29776846.37	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2895
2899	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2896
2900	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2897
2901	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	110759064.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2898
2902	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2899
2904	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2901
2905	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2902
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2903
2907	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2904
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2905
_	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2906
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2907
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2908
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2909
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2911
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2912
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2913
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2914
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2915
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2916
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2917
2921	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2918
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2919
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2921
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2922
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2923
2927	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2924
2928	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2925
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2926
2930	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2927
2931	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2928
2932	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2929
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2931
2935	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2932
2936	10-SoCal_Refineries (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2933
2937	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2934
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2935
2939	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2936
2940	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2937
2941	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2938
2942	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2939

	A	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2944	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2941
2945	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2942
2946	10-SoCal_Refineries (HighAmbitious_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2943
2947	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2944
2948	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	34531602.99	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2945
2949	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2946
2950	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2947
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2948
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2949
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2951
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2952
	10-SoCal_Refineries (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT2953
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3094
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3095
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3096
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3097
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3098
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3099
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3101
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3102
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3103
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3104
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3105
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3106
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3107
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3108
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3109
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	NG COLA FF (MT COLA (MANABELL)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3111
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3112
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2031_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3113
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3114 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3115
	1	2032_H2-NG			
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3116
	1		Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3117
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3118 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT3119
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2032_H2-NG 2032_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT3121
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2032_H2-NG 2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3121 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT3122
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3122 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3123
		2032_H2-NG 2033_H2-NG			
	11-SoCal_Refineries (HighAmbitious_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3124
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3125
5129	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	08.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3126

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3130	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3127
3131	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	117596313.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3128
3132	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3129
3134	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3131
3135	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3132
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3133
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3134
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	21797159.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3135
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3136
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3137
-	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	117046363.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3138
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3139
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3141
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3142
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3143
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3144
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3145
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3146
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3147
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3148
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3149
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3151
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3152
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2035_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3153
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3154
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3155
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3156
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3157
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3158
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3159
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	NG CHA EE (MT CHA/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3161
	4	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3162
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2036_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3163
	1	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3164
	11-SoCal_Refineries (HighAmbitious_ICEngines) 11-SoCal_Refineries (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3165
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3166
—	11-SoCal_Refineries (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/vr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3167 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT3168
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3168 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3169
		2037_H2-NG 2037_H2-NG			
	11-SoCal_Refineries (HighAmbitious_ICEngines)		NG CHA EE (MT CHA/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3171
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3172
21/6	11-SoCal_Refineries (HighAmbitious_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3173

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Property of the control of the	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3177	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3174
3178	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	27461405.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3175
3179	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3176
3180	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3177
3181	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	112756225.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3178
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3179
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3181
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3182
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3183
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3184
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3185
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3186
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3187
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3188
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3189
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3191
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3192
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3193
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3194
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3195
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3196
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3197
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3198
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3199
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3201
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3202
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3203
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3204
	_ ` ` ′	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3205
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3206
<u> </u>	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3207
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3208
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3209
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3211
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3212
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3213
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3214
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3215
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3216
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3217
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3218
3222	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3219

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3224	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3221
3225	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3222
3226	11-SoCal_Refineries (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3223
3227	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3224
3228	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	32724765.04	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3225
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3226
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3227
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3228
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3229
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3231
_	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3232
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3233
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3234
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3235
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3236
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3237
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3238
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3239
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3241
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3242
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3243
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3244
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3245
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3246
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3247
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3248
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3249
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3251
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3252
	11-SoCal_Refineries (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3253
3397	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3394
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3395
3399	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3396
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3397
3401	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3398
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3399
3404	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	NG CHA FE (MT CHA/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3401
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3402
3406	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2030_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3403 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT3404
3407	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3404
3408	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3406
3409	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	/6.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3406

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3410	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3407
3411	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	119578262.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3408
3412	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3409
3414	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3411
3415	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3412
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3413
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3414
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	18069173.76	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3415
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3416
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3417
_	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	118220721.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3418
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3419
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3421
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3422
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3423
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3424
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3425
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3426
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3427
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3428
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3429
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3431
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3432
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3433
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3434
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3435
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3436
3440	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3437
3441	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3438
3442	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3439
3444	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3441
3445	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3442
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3444
3447	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3444
	,	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3445
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3446
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtw/vr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3447
3451	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Percent (set/100 set)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3448
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT3449
	4 - · · · · - · ·	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3451
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3452
3456	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3453

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	.") .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3457	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3454
3458	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	24103493.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3455
3459	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3456
3460	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3457
3461	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	111406622.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3458
3462	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3459
3464	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3461
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3462
3466	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3463
3467	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3464
3468	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	26350860.63	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3465
3469	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3466
3470	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3467
3471	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	114419638.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3468
3472	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3469
3474	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3471
3475	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3472
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3473
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3474
_	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	27461405.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3475
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3476
3480	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3477
3481	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3478
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3479
		2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3481
3485	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3482
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3483
3487	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3484
3488	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	28534687.99	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3485
	1 - , , , , , , , , , , , , , , , , , ,	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3486
3490	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3487
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3488
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3489
3494	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3491
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3492
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3493
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3494
3498	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	29776846.37	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3495
3499	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3496
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3497
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3498
3502	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3499

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3504	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3501
3505	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3502
3506	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3503
3507	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3504
3508	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	30602050.08	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3505
3509	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3506
3510	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3507
3511	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	108931199.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3508
3512	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3509
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3511
3515	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3512
3516	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3513
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3514
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	31563170.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3515
3519	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3516
3520	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3517
3521	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	107937336.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3518
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3519
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3521
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3522
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3523
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3524
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3525
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3526
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3527
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3528
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3529
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3531
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3532
3536	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3533
3537	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	78.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3534
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3535
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3536
3540	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3537
3541	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3538
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3539
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3541
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3542
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3543
	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3544
	_ `	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3545
3549	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3546

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_	Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3550	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3547
3551	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	106708338.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3548
3552	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3549
3554	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3551
3555	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3552
3556	12-SoCal_Refineries (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3553
3697	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3694
3698	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	1338727.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3695
3699	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3696
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3697
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	20998808.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3698
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3699
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3701
3705	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3702
3706	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3703
3707	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3704
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3705
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3706
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3707
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3708
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3709
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3711
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3712
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3713
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3714
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3715
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3716
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3717
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3718
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3719
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3721
_	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3722
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3723
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3724
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3725
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3726
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3727
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3728
3732	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3729
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3731
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3732
3/36	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3733

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	oond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
3737	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3734
3738	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	2045242.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3735
3739	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3736
3740	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3737
3741	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	21549706.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3738
3742	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3739
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3741
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3742
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3743
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3744
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3745
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3746
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3747
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3748
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3749
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3751
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3752
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3753
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3754
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3755
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3756
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3757
3761	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3758
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3759
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3761
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3762
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3763
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3764
	4 – ° ' ' – ' '	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3765
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3766
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3767
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3768
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3769
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3771
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3772
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3773
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3774
-	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3775
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3776
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3777
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3778
3/82	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3779

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2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3784	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3781
3785	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3782
3786	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3783
3787	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3784
3788	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	2646305.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3785
3789	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3786
3790	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3787
3791	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	22266689.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3788
3792	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3789
3794	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3791
3795	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3792
3796	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3793
3797	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3794
3798	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	2803821.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3795
3799	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3796
3800	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3797
3801	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3798
3802	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3799
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3801
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3802
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3803
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3804
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3805
_	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3806
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3807
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3808
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3809
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3811
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3812
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3813
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3814
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3815
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3816
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3817
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3818
3822	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3819
3824	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3821
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3822
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2042_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3823
3827	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3824
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3825
3829	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3826

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	_			
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3830	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3827
3831	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	22927071.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3828
3832	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3829
3834	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3831
3835	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3832
3836	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3833
3837	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3834
3838	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	3319485.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3835
3839	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3836
3840	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3837
3841	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	23059819.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3838
3842	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3839
3844	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3841
3845	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3842
3846	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3843
3847	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3844
3848	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	3424484.90	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3845
3849	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3846
3850	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3847
3851	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	23176509.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3848
3852	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3849
3854	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3851
3855	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3852
	13-SoCal_FoodBeverage (LowConservative_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3853
3997	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3994
3998	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	1338727.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3995
3999	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3996
4000	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3997
4001	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3998
4002	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT3999
4004	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4001
4005	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4002
4006	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4003
4007	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4004
-	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4005
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4006
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4007
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4008
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4009
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4011
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4012
4016	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4013

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4017	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4014
4018	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	1720576.72	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4015
4019	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4016
4020	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4017
4021	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	21323086.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4018
4022	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4019
4024	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4021
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4022
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4023
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4024
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4025
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4026
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4027
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4028
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4029
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4031
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4032
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4033
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4034
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4035
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4036
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4037
4041	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4038
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4039
4044	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4041
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4042
	-	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4043
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4044
		2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4045
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4046
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4047
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4048
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4049
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4051
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4052
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4053
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4054
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4055
	<u> </u>	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4056
		2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4057
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4058
4062	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4059

	А	С	D	Е	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	oond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4064	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4061
4065	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4062
4066	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4063
4067	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4064
4068	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	2437654.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4065
4069	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4066
4070	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4067
4071	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	21919128.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4068
4072	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4069
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4071
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4072
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4073
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4074
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4075
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4076
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4077
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4078
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4079
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4081
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4082
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4083
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4084
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4085
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4086
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4087
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4088
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4089
4094	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4091
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4092
4096	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4093
4097	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4094
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4095
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4096
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4097
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4098
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4099
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	NG COLA FF (MT COLA (MANDE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4101
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4102
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2040_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4103
4107	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4104
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4105
4109	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4106

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2	Tab Contents				1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	nction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4107
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4108
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4109
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4111
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4112
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4113
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4114
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4115
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4116
-	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4117
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4118
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4119
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4121
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4122
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2042_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4123
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4124
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4125
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4126
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4127
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4128
	14-SoCal_FoodBeverage (LowConservative_ECOvens) 14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4129
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4131 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4132
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4132 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4133
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2043_112-NG 2044 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4133 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4134
	14-SoCal FoodBeverage (LowConservative_Ecovens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4134 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4135
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4136
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4137
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4138
	14-SoCal FoodBeverage (LowConservative_Ecovens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT4139
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4141
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4142
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4143
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4144
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4145
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4146
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4147
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4148
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4149
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4151
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4152
	14-SoCal_FoodBeverage (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4153
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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Property of the control of the	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4297	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4294
4298	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	1338727.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4295
4299	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4296
4300	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4297
4301	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	20998808.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4298
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4299
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4301
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4302
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4303
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4304
_	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4305
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4306
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4307
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4308
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4309
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4311
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4312
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4313
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4314
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4315
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4316
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4317
4321	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4318
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4319
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	NG CUA FF (MT CUA MARRY)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4321
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4322
	15-SoCal_FoodBeverage (LowConservative_ICEngines) 15-SoCal_FoodBeverage (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4323
		2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4324
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG 2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4325
	15-SoCal_FoodBeverage (LowConservative_ICEngines) 15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG 2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT4326
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG 2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4327 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4328
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4329
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG 2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4329 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4331
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4332
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4333 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4333
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2033_H2-NG 2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4334
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4334 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4335
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4336 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4336
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4337
4341	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4338 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4338
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG 2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4339 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4339
4342	TTO 2000 IL DOUDEACI URE (FOMCOUSEI AUTINE ICEURINES)	2034_112-110	02 1 ETCETT (3CJ/ 100-3CJ)	13.00	ALI 1_0110_111du3trow_3_batar1ep_30ca10as.AlsA, 1. bata_r1ep_111du3trial, Cell A14333

	A	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep Industrial" tak	o. The input data in this tab was processed through the fu	inction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations			•	
4	In this workbook, the terms "Low", "Mid", and "High" corresp				
5	, , , , , , , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4344	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4341
4345	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4342
4346	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4343
4347	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4344
4348	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	2187824.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4345
4349	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4346
4350	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4347
4351	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	21673963.65	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4348
4352	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4349
4354	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4351
4355	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4352
4356	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4353
4357	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4354
4358	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	2318333.29	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4355
4359	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4356
4360	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4357
4361	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	21772096.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4358
4362	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4359
4364	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4361
4365	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4362
4366	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4363
4367	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4364
4368	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	2437654.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4365
4369	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4366
4370	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4367
4371	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	21919128.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4368
4372	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4369
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4371
4375	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4372
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4373
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4374
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4375
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4376
	_	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4377
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4378
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4379
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4381
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4382
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4383
4387	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4384
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4385
4389	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4386

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculations'				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4390	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4387
4391	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	22266689.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4388
4392	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4389
4394	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4391
4395	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4392
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4393
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4394
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4395
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4396
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4397
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4398
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4399
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4401
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4402
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4403
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4404
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	2948883.63	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4405
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4406
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4407
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4408
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4409
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4411
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4412
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4413
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4414
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4415
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4416
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4417
4421	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4418
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4419
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4421
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4422
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4423
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4424
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4425
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4426
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4427
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4428
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4429
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4431
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4432
4436	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4433

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	" .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4437	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4434
4438	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	3319485.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4435
4439	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4436
4440	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4437
4441	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	23059819.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4438
4442	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4439
4444	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4441
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4442
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4443
4447	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4444
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4445
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4446
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4447
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4448
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4449
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4451
	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4452
_	15-SoCal_FoodBeverage (LowConservative_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4453
4597	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4594
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4595
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4596
4600	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4597
4601	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4598
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4599
4604	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	NG CUA FF (MT CUA MARRY)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4601
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4602
4606	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4603
4607	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4604
4608	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4605 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4606
4609 4610	16-SoCal_FoodBeverage (LowConservative_ICTurbines) 16-SoCal_FoodBeverage (LowConservative_ICTurbines)		Blend % H2 (scf/100-scf)		
4611	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4607 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4608
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4609 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4609
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4609 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4611
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4612
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4613
4617	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2031_H2-NG 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4614 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4614
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4615
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4616 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4616
4620	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4617
4621	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4618
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG 2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4619 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4619
4022	TTO 200001 TO OUR DEVELORE (FOW COURSEL AND MAKE TICH IN DILIES)	2032_112-110	02 1 ETCETT (3CJ/ 100-3CJ)	15.00	ALI 1_0110_IIIdustrow_3_batarrep_socaldas.xisx, 1. bata_rrep_iiidustrial, Cell A14013

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	o. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4624	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4621
4625	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4622
4626	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4623
4627	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4624
4628	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	1889746.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4625
4629	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4626
4630	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4627
4631	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	21425777.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4628
4632	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4629
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4631
4635	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4632
4636	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4633
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4634
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4635
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4636
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4637
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4638
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4639
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4641
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4642
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4643
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4644
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4645
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4646
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4647
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4648
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4649
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4651
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4652
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4653
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4654
_	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4655
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4656
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4657
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4658
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4659
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4661
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4662
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2036_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4663
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4664
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4665
4669	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4666

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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4670	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4667
4671	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	21919128.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4668
4672	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4669
4674	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4671
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4672
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4673
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4674
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4675
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4676
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4677
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4678
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4679
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4681
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4682
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4683
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4684
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4685
4689	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4686
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4687
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4688
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4689
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4691
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4692
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4693
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4694
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4695
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4696
4700	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4697
4701	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4698
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4699
	16-SoCal_FoodBeverage (LowConservative_ICTurbines) 16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG 2040_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4701
			NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4702
	16-SoCal_FoodBeverage (LowConservative_ICTurbines) 16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2040_H2-NG 2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4703 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4704
	16-SoCal FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4704 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4705
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4705 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4706
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4706 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4707
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4707 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4708
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4708 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4709
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4709 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4711
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4711 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4712
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4712 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4713
4/10	Tro-20cal_Loonbeserage (rowcouzersatise_ic_inipilies)	7041_UZ-ING	ING INZO EF (IVIT INZO/IVIIVIBLU)	0.00	ALFI_GIIG_IIIGUSTPUW_5_DataFlep_SUCalGas.xisx, 1. Data_Flep_IIIGUSTIIai, Cell A14/13

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4717	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4714
4718	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	3082543.87	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4715
4719	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4716
4720	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4717
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	22770896.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4718
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4719
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4721
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4722
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4723
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4724
_	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4725
<u> </u>	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4726
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4727
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4728
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4729
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4731
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4732
_	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4733
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4734
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4735
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4736
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4737
4741	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4738
_	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4739
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4741
	16-SoCal_FoodBeverage (LowConservative_ICTurbines) 16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT4742
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4743 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4744
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4745
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG 2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4745 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4746
4749	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4740 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4747
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4748
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4749
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4751
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4752
	16-SoCal_FoodBeverage (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4753
4897	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4894
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4895
4899	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4896
4900	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4897
4901	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4898
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4899
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4904	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4901
4905	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4902
4906	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4903
4907	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4904
4908	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	3290883.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4905
4909	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4906
4910	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4907
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	21193994.63	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4908
4912	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4909
4914	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4911
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4912
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4913
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4914
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4915
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4916
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4917
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4918
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4919
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4921
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4922
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4923
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4924
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4925
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4926
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4927
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4928
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4929
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4931
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4932
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4933
4937	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4934
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4935
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4936
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4937
4941	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4938
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4939
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4941
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4942
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2034_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4943
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4944
4948	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4945
4949	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4946

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4950	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4947
4951	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	21673963.65	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4948
4952	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4949
4954	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4951
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4952
4956	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4953
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4954
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4955
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4956
4960	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4957
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4958
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4959
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4961
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4962
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4963
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4964
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	5809861.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4965
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4966
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4967
		2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4968
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4969
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4971
		2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4972
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4973
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4974
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4975
		2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4976
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4977
4981	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4978
4982	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4979
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4981
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4982
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4983
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4984
	-	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4985
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4986
4990	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4987
4991	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4988
4992		2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4989
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4991
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4992
4996	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4993

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4997	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4994
4998	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	6983041.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4995
4999	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4996
5000	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4997
5001	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	22440474.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4998
5002	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT4999
5004	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5001
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5002
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5003
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5004
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5005
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5006
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5007
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5008
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5009
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5011
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5012
_	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5013
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5014
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5015
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5016
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5017
5021	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5018
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5019
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	NG CUA EF (MT CUA (MARP++)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5021
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5022
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5023 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5024
5027	17-SoCal_FoodBeverage (MidModerate_ECGeneral) 17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5025 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5026
5030	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5027
	17-Socal_FoodBeverage (MidModerate_EcGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5028
5032	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5029
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5031
	17-Socal_FoodBeverage (MidModerate_EcGeneral)	2043_H2-NG 2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5032
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5032 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5033
5037	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2043_H2 NG 2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5034
	17-Socal_FoodBeverage (MidModerate_EcGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5034 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5035
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5036
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5037
5041	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5038
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5039
JU42	11/ 200ai_i oodbeverage (iviidivioderate_ecdellerai)	20 44 _112-110	02 1 ercent (3c)/100-3c)/	3.00	ALI 1_0110_111du3trow_3_batar1ep_30ca10as.AlsA, 1. bata_r1ep_111du3trial, Cell A13033

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tab	o. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	servative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5044	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5041
5045	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5042
5046	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5043
5047	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5044
5048	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	8910841.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5045
5049	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5046
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5047
5051	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	23176509.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5048
5052	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5049
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5051
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5052
	17-SoCal_FoodBeverage (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5053
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5194
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5195
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5196
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5197
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5198
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5199
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5201
	4 - · · · · · · - · · · · · · · · · · ·	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5202
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5203
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5204
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5205
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5206
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5207
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5208
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5209
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5211
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5212
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5213
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5214
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5215
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5216
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5217
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (scf/100 scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5218
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5219
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5221
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5222
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2032_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5223
5227	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5224
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5225
5229	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5226

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5230	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5227
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	21425777.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5228
5232	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5229
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5231
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5232
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5233
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5234
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5235
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5236
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5237
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5238
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5239
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5241
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5242
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5243
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5244
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5245
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5246
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5247
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5248
	18-SoCal_FoodBeverage (MidModerate_ECOvens) 18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5249 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5251
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_industrow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT5251 ALP1_GHG_industrow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT5252
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5252 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5253
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2035_H2-NG 2036 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG Industrow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT5254
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5255
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5256
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5257
	18-SoCal FoodBeverage (MidModerate ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5258
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5259
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5261
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5262
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5263
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5264
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5265
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5266
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5267
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5268
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5269
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5271
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5272
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5273
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5277	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5274
5278	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	6185478.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5275
5279	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5276
5280	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5277
5281	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	22099868.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5278
5282	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5279
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5281
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5282
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5283
5287	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5284
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5285
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5286
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5287
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5288
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5289
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5291
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5292
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5293
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5294
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5295
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5296
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5297
5301	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5298
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5299
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5301
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5302
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2040_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5303 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5304
	18-SoCal_FoodBeverage (MidModerate_ECOvens) 18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG 2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		
5308	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5305 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5306
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5307
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5308
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5309
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5311
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5312
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5312 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5313
	18-SoCal_FoodBeverage (MidModerate_Ecovens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5314
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5315
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5316
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5317
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5318
	18-SoCal_FoodBeverage (MidModerate_Ecovens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5319
JJ22	TTO SOCAL TOOUBEVELUE (IMINIMINIONELINIE TECONELIN)	2074_114-NO	02 Citcin (30) 100 30)	19.00	7.E. 1_5.16_industriow_5_butti 1cp_50cardus.xisx, 1. butta_i 1cp_industrial, Cell 715515

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
5324	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5321
5325	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5322
5326	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5323
5327	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5324
5328	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	8198878.52	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5325
5329	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5326
5330	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5327
5331	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5328
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5329
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5331
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5332
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5333
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5334
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5335
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5336
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5337
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5338
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5339
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5341
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5342
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5343
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5344
5348	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5345
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5346
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5347
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5348
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5349
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5351
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5352
	18-SoCal_FoodBeverage (MidModerate_ECOvens)	2045_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5353
5497	19-SoCal_FoodBeverage (MidModerate_ICEngines) 19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5494
		2030_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5495
	19-SoCal_FoodBeverage (MidModerate_ICEngines) 19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5496 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT5497
					ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5497
5501 5502	19-SoCal_FoodBeverage (MidModerate_ICEngines) 19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5498 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT5499
5504	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5499 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5501
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG 2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5501 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5502
5506	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG 2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		
5507	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2030_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5503 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5504
5508	19-SoCal_FoodBeverage (MidModerate_ICEngines)				
		2031_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5505
5509	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	/6.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5506

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5510	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5507
5511	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	21193994.63	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5508
5512	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5509
5514	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5511
5515	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5512
5516	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5513
5517	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5514
5518	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	3760664.22	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5515
5519	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5516
5520	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5517
5521	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	21323086.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5518
5522	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5519
5524	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5521
5525	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5522
5526	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5523
5527	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5524
5528	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	4204771.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5525
5529	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5526
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5527
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5528
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5529
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5531
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5532
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5533
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5534
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5535
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5536
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5537
5541	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5538
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5539
5544	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5541
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5542
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5543
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5544
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5545
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5546
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5547
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5548
5552	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5549
5554	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5551
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5552
5556	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5553

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5557	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5554
5558	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	5428608.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5555
5559	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5556
5560	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5557
5561	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	21772096.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5558
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5559
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5561
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5562
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5563
5567	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5564
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5565
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5566
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5567
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5568
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5569
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5571
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5572
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5573
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5574
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5575
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5576
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5577
5581	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5578
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5579
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5581
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5582
5586	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5583
5587	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5584
5588	19-SoCal_FoodBeverage (MidModerate_ICEngines) 19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5585
5589 5590	19-SoCal_FoodBeverage (MidModerate_ICEngines)				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5586 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5587
5591	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5588
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT5589
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5591
5595	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_soCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT5591 ALP1_GHG_Industrow_3_DataFrep_soCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT5592
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5593
5597	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2039_H2-NG 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5594
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_bataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5595 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5595
5599	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5596
5600	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5597
5601	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5598
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG 2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5599 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5599
3002	T-3-20 Cal_rooubeverage (iviidivioderate_iceligilies)	2040_02-110	02 FETCEIII (3CJ/ 100-3CJ)	15.00	ALT 1_0110_111dustrow_3_batar1ep_socaldas.AlsX, 1. bata_r1ep_111dustrial, Cell A15539

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp		ervative", "Moderate", and "Ambitious" market scenario	S.	
5	, , , , , , , , , , , , , , , , , , , ,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5604	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5601
5605	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5602
5606	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5603
5607	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5604
5608	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	7406713.97	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5605
5609	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5606
5610	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5607
5611	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	22613434.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5608
5612	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5609
5614	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5611
5615	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5612
5616	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5613
5617	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5614
5618	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	7810297.54	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5615
5619	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5616
5620	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5617
5621	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	22770896.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5618
5622	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5619
5624	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5621
5625	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5622
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5623
5627	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5624
5628	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	8198878.52	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5625
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5626
5630	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5627
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	22927071.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5628
5632	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5629
5634	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5631
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5632
5636	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5633
5637	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5634
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5635
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5636
5640	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5637
5641	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5638
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5639
5644	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5641
5645	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5642
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5643
5647	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5644
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5645
5649	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5646

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1		•	•	•	
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5650	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5647
	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	23176509.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5648
5652	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5649
5654	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5651
5655	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5652
5656	19-SoCal_FoodBeverage (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5653
5797	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5794
5798	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	2790675.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5795
5799	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5796
5800	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5797
5801	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	20998808.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5798
5802	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5799
5804	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5801
5805	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5802
5806	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5803
5807	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5804
5808	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	3290883.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5805
5809	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5806
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5807
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5808
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5809
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5811
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5812
_	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5813
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5814
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5815
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5816
5820	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5817
5821	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5818
5822	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5819
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5821
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5822
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5823
5827	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5824
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5825
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5826
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5827
5831	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5828
5832	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5829
5834	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5831
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5832
5836	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5833

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	" .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5837	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5834
5838	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	4633047.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5835
5839	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5836
5840	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5837
5841	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	21549706.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5838
5842	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5839
5844	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5841
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5842
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5843
5847	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5844
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5845
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5846
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5847
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5848
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5849
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5851
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5852
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5853
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5854
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5855
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5856
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5857
5861	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5858
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5859
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5861
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5862
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5863
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5864
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5865
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5866
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5867
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5868
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5869
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5871
	20-SoCal_FoodBeverage (MidModerate_ICTurbines) 20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5872 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT5873
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2037_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5873 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5874
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5874 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5875
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		
5880	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5876 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5877
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		
		2038_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5878 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT5879
2007	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5879

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
5884	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5881
5885	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5882
5886	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5883
5887	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5884
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	6543637.57	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5885
5889	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5886
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5887
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	22266689.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5888
5892	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5889
5894	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5891
	,	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5892
_	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5893
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5894
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5895
	1	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5896
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5897
5901	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5898
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5899
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5901
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5902
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5903
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5904
	,	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5905
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5906
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5907
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5908
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5909
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5911
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5912
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5913
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5914
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5915
	20-SoCal_FoodBeverage (MidModerate_ICTurbines) 20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5916 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5917
		2042_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		
5921	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5918 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT5919
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5919 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT5921
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	NG CHA FE (MT CHA/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5921
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5922
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT5923
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5924
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5925
3929	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5926

	A	С	D	E	F			
1		_						
2	Tab Contents							
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab						
3	Industrial GHG Calc" to produce the results in "4. Calculations".							
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.				
5								
6	Equipment ID	Fuel Type	Parameter	Value	Reference			
5930	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5927			
5931	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	22927071.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5928			
5932	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5929			
5934	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5931			
5935	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5932			
5936	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5933			
5937	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5934			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	8564868.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5935			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5936			
5940	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5937			
5941	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5938			
5942	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5939			
5944	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5941			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5942			
5946	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5943			
5947	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5944			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5945			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5946			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5947			
5951	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5948			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5949			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5951			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5952			
	20-SoCal_FoodBeverage (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT5953			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6094			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6095			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6096			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6097			
6101	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6098			
6102	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6099			
6104	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6101			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6102			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6103			
	-	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6104			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6105			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6106			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6107			
6111	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6108			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6109			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6111			
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6112			
6116	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6113			

	А	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	servative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6117	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6114
6118	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	3760664.22	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6115
6119	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6116
6120	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6117
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	21323086.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6118
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6119
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6121
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6122
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6123
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6124
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6125
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6126
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6127
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6128
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6129
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6131
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6132
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6133
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6134
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6135
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6136
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6137
-	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6138
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6139
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6141
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6142
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral) 21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6143
		2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6144
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral) 21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2035_H2-NG 2035_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6145
					ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6146
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral) 21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6147 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6148
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6149
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6151
	21-SoCal FoodBeverage (HighAmbitious ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT6152
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6153
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2035_H2-NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6154
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6155
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6156
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6157
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6158
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6159
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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6164	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6161
6165	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6162
6166	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6163
6167	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6164
6168	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	5809861.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6165
6169	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6166
6170	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6167
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	21919128.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6168
6172	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6169
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6171
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6172
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6173
6177	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6174
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6175
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6176
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6177
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6178
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6179
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6181
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6182
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6183
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6184
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6185
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6186
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6187
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6188
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6189
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6191
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6192
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6193
6197	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6194
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6195
	21-SoCal_FoodBoyerage (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6196
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6197
6201	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6198
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6199
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6201
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6202
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6203
6207	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6204
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6205
6209	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6206

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1		_							
2	Tab Contents								
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ					
3	Industrial GHG Calc" to produce the results in "4. Calculations"	Industrial GHG Calc" to produce the results in "4. Calculations".							
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.					
5									
6	Equipment ID	Fuel Type	Parameter	Value	Reference				
6210	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6207				
6211	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	22613434.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6208				
6212	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6209				
6214	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6211				
6215	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6212				
6216	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6213				
6217	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6214				
6218	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	7810297.54	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6215				
6219	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6216				
6220	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6217				
6221	_	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6218				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6219				
6224	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6221				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6222				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6223				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	98.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6224				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6225				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6226				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6227				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6228				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6229				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6231				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6232				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6233				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6234				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6235				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6236				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6237				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6238				
6242	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6239				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6241				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6242				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6243				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6244				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6245				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6246				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6247				
6251	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6248				
6252	- 0 ` 0 - ,	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6249				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6251				
	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6252				
6256	21-SoCal_FoodBeverage (HighAmbitious_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6253				

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6397	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6394
6398	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	2790675.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6395
6399	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6396
6400	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6397
6401	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	20998808.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6398
6402	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6399
6404	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6401
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6402
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6403
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6404
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6405
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6406
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6407
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6408
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6409
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6411
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6412
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6413
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6414
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6415
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6416
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6417
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6418
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6419
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6421
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6422
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6423
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6424
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6425
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6426
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtw/m)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6427
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6428
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens) 22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6429 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT6431
		2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6431
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens) 22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6432 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT6433
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2033_H2-NG 2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6433 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6434
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG 2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6434 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6435
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG 2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG 2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6436 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6437
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)		BSL NG Consumption (MMBtu/yr)		
		2034_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6438
0442	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6439

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5				-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6444	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6441
6445	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6442
6446	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6443
6447	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6444
6448	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	5042861.11	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6445
6449	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6446
6450	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6447
6451	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	21673963.65	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6448
6452	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6449
6454	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6451
6455	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6452
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6453
6457	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6454
6458	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	5428608.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6455
6459	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6456
6460	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6457
6461	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	21772096.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6458
6462	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6459
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6461
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6462
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6463
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6464
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6465
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6466
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6467
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6468
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6469
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6471
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6472
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6473
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6474
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6475
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6476
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6477
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6478
6482	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6479
6484	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6481
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6482
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6483
6487	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6484
6488		2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6485
6489	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6486

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2	Tab Contents				1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	p_Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6490	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6487
6491	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6488
6492	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6489
		2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6491
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6492
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6493
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6494
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6495
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6496
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6497
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6498
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6499
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6501
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6502
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6503
6507	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6504
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6505
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6506
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6507
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6508
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6509
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6511
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6512
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2041_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6513
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6514
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6515
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6516
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6517
6521	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6518
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6519
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6521
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6522
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2042_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6523
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6524
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (set/100 set)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6525
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Rland % H3 (scf/100 scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6526
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6527
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6528
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6529
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	NG CHA EE (MT CHA (MMARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6531
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT6532
0530	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6533

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6537	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6534
6538	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	8564868.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6535
6539	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6536
6540	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6537
6541	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	23059819.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6538
6542	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6539
6544	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6541
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6542
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6543
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6544
<u> </u>	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6545
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6546
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6547
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6548
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6549
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6551
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6552
	22-SoCal_FoodBeverage (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6553
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6694
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6695
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6696
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6697
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6698
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6699
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6701
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6702
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6703
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6704
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6705
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6706
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6707
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6708
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6709
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6711
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6712
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2031_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6713
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6714
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6715
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6716
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6717
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6718
6/22	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6719

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5				-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6724	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6721
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6722
6726	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6723
6727	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6724
6728	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	4204771.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6725
6729	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6726
6730	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6727
6731	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	21425777.13	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6728
6732	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6729
6734	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6731
6735	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6732
6736	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6733
6737	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6734
6738	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	4633047.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6735
6739	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6736
6740	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6737
6741	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	21549706.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6738
6742	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6739
6744	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6741
6745	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6742
6746	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6743
6747	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6744
6748	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	5042861.11	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6745
6749	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6746
6750	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6747
6751	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	21673963.65	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6748
6752	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6749
6754	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6751
6755	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6752
6756	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6753
6757	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6754
6758	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	5428608.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6755
6759	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6756
6760	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6757
6761	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	21772096.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6758
6762	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6759
6764	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6761
6765	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6762
6766	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6763
6767	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6764
6768	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	5809861.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6765
6769	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6766

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1		<u> </u>			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tak	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculation:	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6770	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6767
6771	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	21919128.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6768
6772	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6769
6774	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6771
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6772
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6773
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6774
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6775
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6776
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6777
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6778
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6779
_	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6781
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6782
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6783
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6784
_	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6785
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6786
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6787
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6788
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6789
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6791
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6792
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6793
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines) 23-SoCal FoodBeverage (HighAmbitious ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6794
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6795 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6796
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT0790 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6797
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataFrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT6798 ALP1_GHG_IndustPow_3_DataFrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6798
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6798 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6799
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6799 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6801
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6802
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT0802 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6803
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6804
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6805
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6806
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6807
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6808
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6809
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6811
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6812
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6813
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
6817	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	1.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6814
6818	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	7810297.54	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6815
6819	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6816
6820	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6817
6821	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	22770896.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6818
6822	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6819
6824	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6821
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6822
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6823
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6824
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6825
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6826
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6827
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6828
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6829
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6831
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6832
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6833
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6834
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6835
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6836
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6837
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6838
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6839
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	NG CUA EF (MT CUA (MARP++)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6841
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6842
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2044_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6843
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines) 23-SoCal FoodBeverage (HighAmbitious ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6844
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG 2045_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6845 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6846
_	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6847
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG 2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6848 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6848
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6849
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6851
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6852
	23-SoCal_FoodBeverage (HighAmbitious_ICEngines)	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6853
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6994
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6995
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6996
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6997
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6998
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT6999
7002	124 30cai_i ooabeverage (HighAllibitious_ICTutbliles)	2030_112-110	02 1 Crecint (36)/ 100-36)/	15.00	ALI 1_GITG_ITIGUSTI GW_5_Data1 TCP_50Ca1Ga3.AlsA, 1. Data_FTCP_ITIGUSTIAI, CEII AT0555

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	" .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7004	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7001
7005	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7002
7006	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7003
7007	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7004
7008	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	3290883.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7005
7009	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7006
7010	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7007
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7008
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7009
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7011
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7012
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7013
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7014
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7015
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7016
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7017
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7018
_	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7019
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7021
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7022
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7023
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7024
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7025
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7026
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7027
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7028
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7029
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	NG CUA FF (MT CUA MARDE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7031
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7032
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7033
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT7034
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7035 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7036
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines) 24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG 2034_H2-NG	Blend % H2 (scf/100-scf)		
					ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7037
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines) 24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG 2034_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7038 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7039
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7039 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7041
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7041 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7042
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG 2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2034_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7043 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7044
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)		PRJ H2 Demand (MMBtu/yr)		
		2035_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7045 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT7046
7049	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	00.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7046

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7050	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7047
7051	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	21673963.65	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7048
7052	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7049
7054	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7051
7055	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7052
7056	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7053
7057	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7054
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	5428608.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7055
7059	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7056
7060	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7057
7061	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	21772096.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7058
7062	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7059
7064	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7061
7065	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7062
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7063
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7064
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7065
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7066
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7067
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7068
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7069
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7071
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7072
-	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7073
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7074
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7075
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7076
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7077
7081	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7078
7082	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7079
7084	-	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7081
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7082
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2038_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7083
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7084
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7085
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7086
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7087
7091	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7088
7092	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7089
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7091
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7092
/096	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7093

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Property of the control of the	ep Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7097	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7094
7098	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	6983041.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7095
7099	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7096
7100	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7097
7101	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	22440474.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7098
7102	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7099
7104	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7101
7105	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7102
7106	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7103
7107	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7104
7108	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	7406713.97	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7105
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7106
7110	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7107
7111	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	22613434.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7108
7112	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7109
7114	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7111
7115	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7112
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7113
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7114
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7115
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7116
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7117
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7118
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7119
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7121
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7122
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7123
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7124
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7125
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7126
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7127
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7128
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7129
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7131
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7132
_	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7133
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7134
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7135
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7136
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7137
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7138
7142	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7139

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pi	ep_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7144	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7141
7145	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7142
7146	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7143
7147	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7144
7148	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	8910841.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7145
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7146
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7147
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	23176509.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7148
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7149
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7151
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7152
	24-SoCal_FoodBeverage (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7153
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7294
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7295
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7296
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7297
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7298
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7299
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7301
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7302
	25-SoCal_Metals (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7303
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7304
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7305
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7306
_	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7307
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7308
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7309
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7311
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7312
	25-SoCal_Metals (LowConservative_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7313
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7314
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7315
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7316
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7317
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7318
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7319
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7321
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7322
	25-SoCal_Metals (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7323
7327	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7324
	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7325
/329	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7326

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	nction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations	1.			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7330	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7327
7331	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	8177000.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7328
7332	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7329
7334	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7331
	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7332
7336	25-SoCal_Metals (LowConservative_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7333
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7334
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	1311201.94	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7335
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7336
_	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7337
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7338
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7339
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7341
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7342
	25-SoCal_Metals (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7343
	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7344
-	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7345
_	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7346
	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7347
	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7348
	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7349
	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7351
	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7352
_	25-SoCal_Metals (LowConservative_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7353
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7354
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7355
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7356
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7357
-	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7358
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7359
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	NG CHA EE (MT CHA (MARREU)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7361
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7362
	25-SoCal_Metals (LowConservative_ECGeneral)	2036_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughput Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT7363
	25-SoCal_Metals (LowConservative_ECGeneral) 25-SoCal Metals (LowConservative ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT7364
	<u> </u>	2037_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (set/100-set)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7365
	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7366
	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT7367
	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT7368
	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT7369
	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7371
	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7372
/3/0	25-SoCal_Metals (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7373

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2	Tab Contents	, , , , , , , , , , , , , , , , , , , ,	·		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7377	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7374
7378	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	1625567.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7375
7379	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7376
	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7377
	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	8559537.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7378
	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7379
	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7381
	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7382
	25-SoCal_Metals (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7383
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7384
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7385
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7386
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7387
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7388
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7389
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7391
	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7392
_	25-SoCal_Metals (LowConservative_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7393
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7394
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7395
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7396
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7397
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7398
_	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7399
	25-SoCal_Metals (LowConservative_ECGeneral) 25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7401
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7402
	25-SoCal_Metals (LowConservative_ECGeneral)	2040_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7404
	-	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7404
	25-SoCal_Metals (LowConservative_ECGeneral) 25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG 2041_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7405 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7406
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7406 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7407
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7407 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7408
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG 2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7408 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7409
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7411
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7411 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7412
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7412 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7413
	25-SoCal_Metals (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7413 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7414
	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7415
	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7416
	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7417
	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7418
	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7418 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7419
1422	125 500ai_ivictais (LOWCOHSCI VALIVE_LCGEHEIAI)	2072_112-110	02 T CTCCTIC (3CJ) 100 3CJ)	3.00	ALI 1_GITG_ITIGUSTI GW_5_Data1 TCP_50CatGas.AlsA, 1. Data_FTCP_ITIGUSTITAI, CCII A17415

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1		•	•		
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5				-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7424	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7421
7425	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7422
7426	25-SoCal_Metals (LowConservative_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7423
7427	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7424
7428	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	1917942.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7425
7429	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7426
7430	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7427
7431	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	9037683.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7428
7432	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7429
7434	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7431
7435	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7432
7436	25-SoCal_Metals (LowConservative_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7433
7437	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7434
7438	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	1965639.31	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7435
7439	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7436
7440	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7437
7441	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	9136463.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7438
7442	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7439
	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7441
	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7442
	25-SoCal_Metals (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7443
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7444
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7445
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7446
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7447
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7448
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7449
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7451
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7452
	25-SoCal_Metals (LowConservative_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7453
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7594
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7595
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7596
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7597
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7598
7602	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7599
7604	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7601
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7602
	26-SoCal_Metals (LowConservative_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7603
7607	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7604
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7605
7609	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7606

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre		nction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7607
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7608
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7609
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7611
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7612
	26-SoCal_Metals (LowConservative_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7613
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7614
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7615
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7616
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7617
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7618
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7619
_	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7621
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7622
	26-SoCal_Metals (LowConservative_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7623
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7625
	26-SoCal_Metals (LowConservative_ECOvens) 26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG 2033_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7625 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7626
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7627 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7627
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7628 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7628
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7629
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7631
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7632
	26-SoCal_Metals (LowConservative_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7633
	26-SoCal_Metals (LowConservative_ECOvens)	2034 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT7634
	26-SoCal_Metals (LowConservative_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7635
	26-SoCal_Metals (LowConservative_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7636
	26-SoCal_Metals (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7637
	26-SoCal Metals (LowConservative ECOvens)	_ 2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7638
	26-SoCal_Metals (LowConservative_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7639
	-	_ 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7641
	26-SoCal_Metals (LowConservative_ECOvens)	_ 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7642
	26-SoCal_Metals (LowConservative_ECOvens)	_ 2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7643
	26-SoCal_Metals (LowConservative_ECOvens)	_ 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7644
7648	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7645
7649	26-SoCal_Metals (LowConservative_ECOvens)	_ 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7646
	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7647
	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7648
7652	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7649
7654	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7651
7655	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7652
7656	26-SoCal_Metals (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7653
7656	26-SoCal_Metals (LowConservative_ECOvens)		NG N2O EF (MT N2O/MMBtu)		

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7657	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7654
7658	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	1479692.48	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7655
7659	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7656
7660	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7657
7661	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	8404104.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7658
	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7659
	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7661
	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7662
	26-SoCal_Metals (LowConservative_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7663
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7664
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7665
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7666
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7667
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7668
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7669
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7671
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7672
	26-SoCal_Metals (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7673
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7674
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7675
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7676
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7677
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7678
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7679
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7681
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7682
	26-SoCal_Metals (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7683
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7684
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ W Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7685
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7686
	26-SoCal_Metals (LowConservative_ECOvens) 26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7687 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7688
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7689 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7689
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7689 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7691
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7691 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7692
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7693 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7693
	26-SoCal_Metals (LowConservative_ECOvens)	2039_H2-NG 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7694 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7694
	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG 2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7695
_	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG 2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7696 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7696
	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG 2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7697 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7697
	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG 2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7698 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7698
	26-SoCal_Metals (LowConservative_ECOvens)	_	O2 Percent (scf/100-scf)		
7702	120-300ai_wietais (Lowconservative_ECOVENS)	2040_H2-NG	02 reiteilt (St.)/100-St.)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7699

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1			•		
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7704	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7701
7705	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7702
7706	26-SoCal_Metals (LowConservative_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7703
7707	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7704
7708	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	1812300.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7705
7709	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7706
7710	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7707
7711	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	8825510.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7708
7712	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7709
7714	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7711
7715	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7712
7716	26-SoCal_Metals (LowConservative_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7713
7717	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7714
7718	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	1866921.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7715
7719	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7716
7720	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7717
7721	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	8924984.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7718
7722	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7719
7724	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7721
	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7722
7726	26-SoCal_Metals (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7723
7727	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7724
	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	1917942.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7725
	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7726
7730	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7727
7731	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	9037683.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7728
	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7729
7734	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7731
	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7732
_	26-SoCal_Metals (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7733
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7734
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7735
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7736
7740	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7737
7741	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7738
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7739
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7741
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7742
	26-SoCal_Metals (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7743
	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7744
	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7745
7749	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7746

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7750	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7747
7751	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	9220600.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7748
7752	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7749
7754	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7751
7755	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7752
7756	26-SoCal_Metals (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7753
7897	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7894
7898	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	893874.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7895
7899	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7896
7900	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7897
7901	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	8124751.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7898
	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7899
7904	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7901
7905	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7902
	27-SoCal_Metals (LowConservative_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7903
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7904
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7905
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7906
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7907
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7908
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7909
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7911
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7912
	27-SoCal_Metals (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7913
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7914
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7915
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7916
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7917
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7918
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7919
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7921
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7922
	27-SoCal_Metals (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7923
	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7924
	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7925
	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7926
	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7927
7931	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7928
7932	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7929
	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7931
	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7932
/936	27-SoCal_Metals (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7933

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Conse	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7937	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7934
7938	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	1311201.94	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7935
7939	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7936
7940	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7937
7941	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	8259407.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7938
7942	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7939
7944	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7941
7945	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7942
7946	27-SoCal_Metals (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7943
	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7944
7948	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	1398477.69	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7945
7949	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7946
7950	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7947
7951	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	8308620.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7948
7952	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7949
7954	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7951
7955	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7952
7956	27-SoCal_Metals (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7953
7957	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7954
	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	1479692.48	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7955
7959	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7956
7960	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7957
7961	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	8404104.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7958
_	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7959
7964	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7961
7965	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7962
7966	27-SoCal_Metals (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7963
7967	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7964
	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	1555254.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7965
7969	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7966
7970	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7967
7971	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	8477359.40	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7968
7972	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7969
7974	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7971
7975	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7972
7976	27-SoCal_Metals (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7973
7977	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7974
7978	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	1625567.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7975
7979	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7976
7980	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7977
7981	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	8559537.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7978
7982	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7979

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
7984	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7981
7985	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7982
7986	27-SoCal_Metals (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7983
7987	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7984
7988	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	1691025.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7985
7989	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7986
7990	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7987
7991	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	8635097.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7988
7992	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7989
	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7991
	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7992
	27-SoCal_Metals (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7993
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7994
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7995
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7996
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7997
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7998
—	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT7999
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8001
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8002
	27-SoCal_Metals (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8003
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8004
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8005
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8006
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8007
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8008
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8009
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8011
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8012
	27-SoCal_Metals (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8013
	27-SoCal_Metals (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8014
	27-SoCal_Metals (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8015
	27-SoCal_Metals (LowConservative_ICEngines)	2042_H2-NG 2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8016 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8017
	27-SoCal_Metals (LowConservative_ICEngines) 27-SoCal Metals (LowConservative ICEngines)		Blend % H2 (scf/100-scf)		
	27-SoCal_Metals (LowConservative_ICEngines)	2042_H2-NG 2042_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8018 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT8019
	- - · · · · - · · · · · · · · · · · · ·	2042_H2-NG 2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8019 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT8021
	27-SoCal_Metals (LowConservative_ICEngines) 27-SoCal_Metals (LowConservative_ICEngines)	2042_H2-NG 2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8021 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT8022
_	27-SoCal_Metals (LowConservative_ICEngines)	2042_H2-NG 2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8022 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8023
		2042_H2-NG 2043_H2-NG			
	27-SoCal_Metals (LowConservative_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8024
	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8025
0029	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8026

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2	Tab Contents	, , , , , , , , , , , , , , , , , , , ,			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tak	ınction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8030	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8027
8031	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	9037683.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8028
8032	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8029
8034	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8031
	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8032
8036	27-SoCal_Metals (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8033
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8034
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8035
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8036
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8037
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8038
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8039
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8041
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8042
	27-SoCal_Metals (LowConservative_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8043
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8044
_	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8045
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8046
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8047
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8048
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8049
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8051
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8052
	27-SoCal_Metals (LowConservative_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8053
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8194
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8195
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8196
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8197
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8198
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8199
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8201 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8202
	28-SoCal_Metals (LowConservative_ICTurbines) 28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG 2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		
	28-SoCal_Metals (LowConservative_ICTurbines)	2030_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8203 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8204
	28-SoCal Metals (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8205
	28-SoCal_Metals (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8205 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8206
	28-SoCal_Metals (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8206 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8207
	28-SoCal_Metals (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8207 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8208
	28-SoCal_Metals (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8208 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8209
	28-SoCal_Metals (LowConservative_ICTurbines)	2031_H2-NG 2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8209 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8211
	28-SoCal_Metals (LowConservative_ICTurbines)		NG CH4 EF (MT CH4/MMBtu)		
	28-SoCal_Metals (LowConservative_ICTurbines) 28-SoCal_Metals (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8212 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8213
0210	120-30Cal_ivictals (LOWCOHSELVALIVE_ICTUIDINES)	2031_H2-NG	INO INZO LE (INTE INZO/ININIDIU)	0.00	ALTI_OHO_Huustrow_3_DataFlep_30Caldas.xisx, 1. Data_Flep_Huustrial, Cell A16213

	А	С	D	E	F
1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep Industrial" tak	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8217	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8214
8218	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	1116892.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8215
8219	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8216
8220	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8217
8221	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	8173460.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8218
8222	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8219
8224	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8221
8225	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8222
8226	28-SoCal_Metals (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8223
8227	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8224
8228	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	1217466.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8225
8229	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8226
8230	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8227
8231	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	8177000.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8228
8232	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8229
8234	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8231
8235	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8232
	28-SoCal_Metals (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8233
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8234
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8235
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8236
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8237
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8238
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8239
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8241
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8242
	28-SoCal_Metals (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8243
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8244
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8245
	4 – ` ·	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8246
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8247
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8248
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8249
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8251
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8252
	28-SoCal_Metals (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8253
	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8254
	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8255
	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8256
	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8257
	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8258
8262	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8259

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep Industrial" tak	o. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations			·	
4	In this workbook, the terms "Low", "Mid", and "High" corresp		ervative", "Moderate", and "Ambitious" market scenario	S.	
5	, , , , , , , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8264	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8261
8265	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8262
8266	28-SoCal_Metals (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8263
8267	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8264
8268	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	1555254.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8265
8269	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8266
8270	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8267
8271	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	8477359.40	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8268
8272	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8269
8274	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8271
8275	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8272
8276	28-SoCal_Metals (LowConservative_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8273
8277	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8274
8278	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	1625567.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8275
8279	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8276
8280	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8277
8281	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	8559537.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8278
8282	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8279
8284	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8281
	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8282
8286	28-SoCal_Metals (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8283
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8284
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8285
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8286
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8287
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8288
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8289
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8291
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8292
	28-SoCal_Metals (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8293
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8294
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8295
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8296
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8297
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8298
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8299
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8301
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8302
	28-SoCal_Metals (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8303
	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8304
	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8305
8309	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8306

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8310	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8307
8311	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	8825510.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8308
8312	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8309
8314	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8311
8315	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8312
8316	28-SoCal_Metals (LowConservative_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8313
8317	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8314
8318	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	1866921.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8315
8319	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8316
8320	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8317
	d - ` ` <i>'</i>	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	8924984.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8318
	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8319
8324	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8321
8325	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8322
8326	28-SoCal_Metals (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8323
8327	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8324
8328	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	1917942.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8325
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8326
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8327
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8328
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8329
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8331
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8332
	28-SoCal_Metals (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8333
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8334
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8335
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8336
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8337
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8338
8342	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8339
8344		2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8341
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8342
	28-SoCal_Metals (LowConservative_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8343
	⊣	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8344
	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8345
	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8346
	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8347
8351	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8348
8352	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8349
	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8351
	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8352
8356	28-SoCal_Metals (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8353

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tal	o. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	ıs".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8497	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8494
8498	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	1098762.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8495
8499	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8496
8500	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8497
8501	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	8124751.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8498
	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8499
8504	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8501
8505	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8502
	29-SoCal_Metals (MidModerate_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8503
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8504
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8505
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8506
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8507
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8508
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8509
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8511
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8512
	29-SoCal_Metals (MidModerate_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8513
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8514
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8515
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8516
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8517
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8518
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8519
-	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8521
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8522
	29-SoCal_Metals (MidModerate_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8523
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8524
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8525
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8526
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8527
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8528
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8529
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8531
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8532
	29-SoCal_Metals (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8533
	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8534
	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8535
	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8536
	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8537
	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8538
8542	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8539

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tak	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8544	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8541
8545	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8542
	29-SoCal_Metals (MidModerate_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8543
8547	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8544
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	1801052.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8545
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8546
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8547
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8548
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8549
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8551
	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8552
_	29-SoCal_Metals (MidModerate_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8553
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8554
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8555
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8556
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8557
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8558
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8559
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8561
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8562
	29-SoCal_Metals (MidModerate_ECGeneral)	2036_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8563
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8564
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8565
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8566
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8567 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8568
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		
	29-SoCal_Metals (MidModerate_ECGeneral) 29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8569 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8571
	29-SoCal_Metals (MidModerate_EcGeneral)	2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8571 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8572
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8573
	29-SoCal_Metals (MidModerate_ECGeneral)	2037_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8574
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8575
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8576
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8577
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8578
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8579
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8581
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8582
	29-SoCal_Metals (MidModerate_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8583
	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8584
	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8585
	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8586
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8590	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8587
8591	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	8635097.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8588
8592	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8589
8594	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8591
8595	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8592
8596	29-SoCal_Metals (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8593
8597	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8594
8598	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	2443131.40	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8595
8599	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8596
8600	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8597
8601	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8598
	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8599
8604	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8601
	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8602
8606	29-SoCal_Metals (MidModerate_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8603
8607	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8604
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8605
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8606
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8607
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8608
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8609
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8611
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8612
	29-SoCal_Metals (MidModerate_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8613
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8614
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8615
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8616
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8617
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8618
8622	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8619
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8621
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8622
	29-SoCal_Metals (MidModerate_ECGeneral)	2042_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8623
	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8624
	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ W Overall H2 as Blend (set/100 set)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8625
	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8626
	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8627 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT8628
8631 8632	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8628
8634	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG 2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8629
	-				ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT8631
	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8632
8636	29-SoCal_Metals (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8633

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2	Tab Contents	,	·		1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations	."			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8637	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8634
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8635
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8636
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8637
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8638
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8639
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8641
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8642
	29-SoCal_Metals (MidModerate_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8643
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8644
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8645
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8646
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8647
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8648
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8649
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8651
	29-SoCal_Metals (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8652
	29-SoCal_Metals (MidModerate_ECGeneral) 30-SoCal_Metals (MidModerate_ECOvens)	2045_H2-NG 2030_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8653 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8794
	30-SoCal_Metals (MidModerate_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8795 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8795
	30-SoCal_Metals (MidModerate_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8796
	30-SoCal_Metals (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8797
	30-SoCal_Metals (MidModerate_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8798
	30-SoCal_Metals (MidModerate_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8799
	30-SoCal Metals (MidModerate ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8801
	30-SoCal Metals (MidModerate ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8802
	30-SoCal Metals (MidModerate ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8803
	30-SoCal_Metals (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8804
	30-SoCal_Metals (MidModerate_ECOvens)	_ 2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8805
	30-SoCal_Metals (MidModerate_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8806
	30-SoCal_Metals (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8807
	30-SoCal_Metals (MidModerate_ECOvens)	_ 2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8808
_	30-SoCal_Metals (MidModerate_ECOvens)	_ 2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8809
	30-SoCal_Metals (MidModerate_ECOvens)	_ 2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8811
8815	30-SoCal_Metals (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8812
8816	30-SoCal_Metals (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8813
8817	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8814
8818	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	1393143.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8815
8819	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8816
8820	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8817
8821	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	8173460.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8818
8822	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8819

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8824	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8821
8825	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8822
8826	30-SoCal_Metals (MidModerate_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8823
8827	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8824
8828	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	1526724.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8825
	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8826
8830	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8827
8831	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	8177000.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8828
	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8829
	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8831
	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8832
	30-SoCal_Metals (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8833
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8834
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8835
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8836
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8837
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8838
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8839
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8841
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8842
	30-SoCal_Metals (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8843
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8844
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8845
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8846
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8847
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8848
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8849
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8851
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8852
	30-SoCal_Metals (MidModerate_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8853
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8854
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8855
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8856
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8857
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8858
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8859
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8861
	30-SoCal_Metals (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8862
	- · · · · · · · · · · · · · · · · · · ·	2036_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8863
	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8864
	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8865
8869	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8866

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
8870	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8867
	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8868
8872	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8869
	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8871
	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8872
	30-SoCal_Metals (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8873
	30-SoCal_Metals (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8874
		2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8875
	30-SoCal_Metals (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8876
	4	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8877
	30-SoCal_Metals (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8878
		2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8879
	30-SoCal_Metals (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8881
	30-SoCal_Metals (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8882
	30-SoCal_Metals (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8883
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8884
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8885
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8886
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8887
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8888
	30-SoCal_Metals (MidModerate_ECOvens) 30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8889
	-	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8891 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8892
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8893 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8893
	30-SoCal_Metals (MidModerate_ECOvens)	2039_H2-NG 2040 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8894
	30-SoCal Metals (MidModerate ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8895
	4	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8896
	30-SoCal_Metals (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8897
8901	30-SoCal Metals (MidModerate ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8898
8902	30-SoCal Metals (MidModerate ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8899
	4	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8901
	30-SoCal_Metals (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8902
	30-SoCal_Metals (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8903
		2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8904
		2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8905
	30-SoCal_Metals (MidModerate_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8906
	30-SoCal_Metals (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8907
8911	30-SoCal_Metals (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8908
	-	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8909
	30-SoCal_Metals (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8911
	30-SoCal_Metals (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8912
	30-SoCal Metals (MidModerate ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8913
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2	Tab Contents	1			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8914
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8915
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8916
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8917
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8918
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8919
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8921
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8922
	30-SoCal_Metals (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8923
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8924
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8925
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8926
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8927
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8928
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8929
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8931
	30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8932
	30-SoCal_Metals (MidModerate_ECOvens) 30-SoCal_Metals (MidModerate_ECOvens)	2043_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8933 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8934
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8935
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8936
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8937
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8938
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8939
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8941
	30-SoCal Metals (MidModerate ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8942
	30-SoCal_Metals (MidModerate_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8943
	30-SoCal_Metals (MidModerate_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8944
	30-SoCal_Metals (MidModerate_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8945
	30-SoCal_Metals (MidModerate_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT8946
	30-SoCal_Metals (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8947
	30-SoCal_Metals (MidModerate_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8948
	30-SoCal_Metals (MidModerate_ECOvens)	_ 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8949
	30-SoCal_Metals (MidModerate_ECOvens)	_ 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8951
	30-SoCal_Metals (MidModerate_ECOvens)	_ 2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8952
8956	30-SoCal_Metals (MidModerate_ECOvens)	_ 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT8953
9097	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9094
9098	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9095
9099	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9096
	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9097
	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9098
9102	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9099

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2	Tab Contents		· · · · · · · · · · · · · · · · · · ·		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9104	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9101
	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9102
9106	31-SoCal_Metals (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9103
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9104
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	1250252.80	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9105
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9106
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9107
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9108
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9109
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9111
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9112
	31-SoCal_Metals (MidModerate_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9113
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9114
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9115
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9116
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9117
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9118
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9119
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9121
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9122
	31-SoCal_Metals (MidModerate_ICEngines)	2032_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9123
	31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9124
	31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9125
	31-SoCal_Metals (MidModerate_ICEngines) 31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG 2033 H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9126 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9127
	31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG 2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9127 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9128
_	31-SoCal Metals (MidModerate_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9128 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9129
	31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG 2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9129 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9131
	31-SoCal Metals (MidModerate_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9132
	31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1 GHG Industrow_3_bataPrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9132 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT9133
	31-SoCal_Metals (MidModerate_ICEngines)	2033_H2-NG 2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9134
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9135
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9136
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9137
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9138
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9139
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9141
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9142
	31-SoCal_Metals (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9143
	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9144
	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9145
	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9146
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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9150	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9147
9151	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	8308620.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9148
9152	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9149
9154	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9151
9155	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9152
9156	31-SoCal_Metals (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9153
9157	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9154
	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	1938399.29	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9155
9159	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9156
	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9157
	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9158
	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9159
9164	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9161
	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9162
	31-SoCal_Metals (MidModerate_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9163
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9164
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9165
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9166
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9167
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9168
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9169
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9171
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9172
	31-SoCal_Metals (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9173
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9174
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9175
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9176
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9177
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9178
9182	- · · · · · · · · · · · · · · · · · · ·	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9179
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9181
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9182
	31-SoCal_Metals (MidModerate_ICEngines)	2038_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9183
	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9184
	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9185
	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9186
	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/vr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9187
9191	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9188
	-	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9189
	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9191
	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9192
9196	31-SoCal_Metals (MidModerate_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9193

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pi	ep Industrial" tak	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation				
4	In this workbook, the terms "Low", "Mid", and "High" corres		ervative", "Moderate", and "Ambitious" market scenario	S.	
5	, , ,		•		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9197	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9194
9198	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	2443131.40	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9195
9199	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9196
9200	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9197
9201	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	8735544.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9198
9202	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9199
9204	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9201
9205	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9202
9206	31-SoCal_Metals (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9203
9207	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9204
9208	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	2564808.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9205
9209	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9206
9210	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9207
9211	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	8825510.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9208
9212	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9209
9214	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9211
9215	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9212
	31-SoCal_Metals (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9213
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9214
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	2686345.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9215
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9216
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9217
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9218
_	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9219
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9221
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9222
	31-SoCal_Metals (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9223
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9224
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9225
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9226
-	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9227
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9228
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9229
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9231
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9232
	31-SoCal_Metals (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9233
	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9234
-	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9235
	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9236
	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9237
	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9238
9242	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9239

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_F	Prep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculatio	ns".			
4	In this workbook, the terms "Low", "Mid", and "High" corre	spond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9244	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9241
9245	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9242
9246	31-SoCal_Metals (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9243
9247	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9244
9248	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	3034179.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9245
9249	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9246
9250	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9247
9251	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	9220600.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9248
9252	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9249
	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9251
	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9252
	31-SoCal_Metals (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9253
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9394
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9395
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9396
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9397
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9398
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9399
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9401
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9402
	32-SoCal_Metals (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9403
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9404
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9405
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9406
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9407
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9408
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9409
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9411
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9412
	32-SoCal_Metals (MidModerate_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9413
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9414
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9415
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9416
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9417
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9418
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9419 ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9421
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9421
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9422
	32-SoCal_Metals (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughput Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9423
	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9424
	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9425
9429	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9426

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tak	. The input data in this tab was processed through the fo	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9430	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9427
9431	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	8177000.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9428
9432	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9429
9434	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9431
9435	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9432
	32-SoCal_Metals (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9433
9437	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9434
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9435
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9436
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9437
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9438
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9439
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9441
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9442
	32-SoCal_Metals (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9443
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9444
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9445
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9446
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9447
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9448
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9449
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9451
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9452
	32-SoCal_Metals (MidModerate_ICTurbines)	2035_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9453
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9454
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9455
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9456
	32-SoCal_Metals (MidModerate_ICTurbines) 32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9457 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9458
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9459
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9459 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9461
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9462
	32-SoCal_Metals (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9463
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9464
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9465
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9466
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9467
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9468
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9469
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9471
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9472
	32-SoCal_Metals (MidModerate_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9473
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9477	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9474
9478	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	2193849.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9475
	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9476
9480	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9477
9481	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	8559537.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9478
	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9479
	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9481
	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9482
	32-SoCal_Metals (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9483
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9484
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9485
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9486
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9487
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9488
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9489
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9491
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9492
	32-SoCal_Metals (MidModerate_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9493
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9494
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9495
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9496
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9497
9501	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9498
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9499
-	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9501
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9502
	32-SoCal_Metals (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9503
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9504
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9505
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9506
—	32-SoCal_Metals (MidModerate_ICTurbines) 32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9507
_	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG 2041_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9508 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9509
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9509 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9511
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9511 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9512
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9512 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9513
	32-SoCal_Metals (MidModerate_ICTurbines)	2041_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9515 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9514
	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG 2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9514 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9515
	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG 2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9515 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9516
	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9510 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9517
	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataFrep_soCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9517 ALP1_GHG_IndustPow_3_DataFrep_soCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT9518
	32-SoCal_Metals (MidModerate_ICTurbines)		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9518 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9519
3322	32-30Cai_ivietais (iviidivioderate_icrui bilies)	2042_H2-NG	02 FETCETT (3CJ/ 100-3CJ)	15.00	ALT 1_0110_111du3tF0w_3_bataF1Ep_30Ca10a3.AlsX, 1. bata_F1Ep_111du3tf1al, Cell A13513

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1			•		
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5				-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9524	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9521
9525	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9522
9526	32-SoCal_Metals (MidModerate_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9523
9527	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9524
9528	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	2809289.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9525
9529	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9526
9530	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9527
9531	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	9037683.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9528
9532	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9529
9534	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9531
9535	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9532
9536	32-SoCal_Metals (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9533
9537	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9534
9538	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	2925413.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9535
9539	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9536
9540	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9537
9541	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	9136463.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9538
9542	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9539
	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9541
	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9542
	32-SoCal_Metals (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9543
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9544
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9545
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9546
-	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9547
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9548
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9549
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9551
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9552
	32-SoCal_Metals (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9553
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9694
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9695
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9696
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9697
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9698
9702	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9699
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9701
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9702
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9703
9707	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9704
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9705
9709	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9706

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9710	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9707
9711	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	8155346.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9708
9712	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9709
9714	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9711
9715	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9712
9716	33-SoCal_Metals (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9713
9717	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9714
9718	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	1393143.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9715
9719	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9716
9720	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9717
9721	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	8173460.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9718
9722	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9719
9724	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9721
9725	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9722
9726	33-SoCal_Metals (HighAmbitious_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9723
9727	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9724
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	1526724.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9725
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9726
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9727
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9728
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9729
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9731
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9732
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9733
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9734
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9735
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9736
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9737
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9738
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9739
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9741
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9742
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9743
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9744
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9745
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9746
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9747
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9748
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9749
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9751
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9752
9756	33-SoCal_Metals (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9753

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9757	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9754
9758	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	1938399.29	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9755
9759	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9756
9760	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9757
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	8404104.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9758
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9759
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9761
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9762
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9763
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9764
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9765
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9766
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9767
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9768
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9769
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9771
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9772
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2037_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9773
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9774
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9775
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9776
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9777
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9778
	33-SoCal_Metals (HighAmbitious_ECGeneral) 33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9779
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9781
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG 2038_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9782
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9783 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9784
	33-SoCal Metals (HighAmbitious ECGeneral)	2039_H2-NG 2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9785
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9786
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9787
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9788
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9789
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9791
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9792
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9793
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9794
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9795
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9796
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9797
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9798
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9799
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the fo	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	· .			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9804	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9801
9805	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9802
9806	33-SoCal_Metals (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9803
9807	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9804
9808	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	2564808.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9805
9809	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9806
9810	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9807
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9808
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9809
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9811
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9812
_	33-SoCal_Metals (HighAmbitious_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9813
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9814
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9815
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9816
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9817
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9818
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9819
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9821
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9822
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9823
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9824
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9825
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9826
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9827
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9828
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9829
-	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9831
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT9832
	33-SoCal_Metals (HighAmbitious_ECGeneral) 33-SoCal_Metals (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9833
		2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9834 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT9835
	33-SoCal_Metals (HighAmbitious_ECGeneral) 33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG 2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9835 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9836
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9837 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9837
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9838
_	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9839
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9839 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9841
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9841 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9842
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9842 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9843
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9844 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9844
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9845
	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG 2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9846 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9846
3049	23-20Cai_Merais (HighAllibitions_Ecgeneral)	2043_FIZ-NO	FIND 70 OVERUIT FIZ US DIETIU (SCJ/ 100-SCJ)	20.00	ALT 1_GITG_ITIGUSTEOW_3_DataFTEP_30CatGas.AlsX, 1. Data_FTEP_ITIGUSTITAL, Cell A19646

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
9850	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9847
9851	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	9220600.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9848
9852	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9849
9854	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9851
9855	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9852
9856	33-SoCal_Metals (HighAmbitious_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9853
9997	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9994
9998	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	1098762.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9995
9999	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9996
	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9997
	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9998
	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9999
	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10001
10005	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10002
	34-SoCal_Metals (HighAmbitious_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10003
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10004
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10005
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10006
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10007
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10008
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10009
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10011
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10012
	34-SoCal_Metals (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10013
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10014
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10015
-	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10016
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10017
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10018
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10019
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10021
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10022
	34-SoCal_Metals (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10023
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10024
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10025
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10026
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10027
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10028
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10029
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10031
	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10032
10036	34-SoCal_Metals (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10033

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5	, , , , , ,		·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10037	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10034
10038	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10035
10039	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10036
10040	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10037
10041	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	8259407.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10038
10042	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10039
10044	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10041
10045	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10042
10046	34-SoCal_Metals (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10043
10047	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10044
10048	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	1801052.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10045
10049	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10046
10050	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10047
10051	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	8308620.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10048
10052	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10049
10054	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10051
10055	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10052
	34-SoCal_Metals (HighAmbitious_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10053
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10054
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10055
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10056
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10057
_	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10058
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10059
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10061
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10062
	34-SoCal_Metals (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10063
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10064
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10065
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10066
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10067
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10068
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10069
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10071
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10072
	34-SoCal_Metals (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10073
	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10074
	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10075
	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10076
	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10077
	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10078
10082	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10079

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1		-			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o_Industrial" tab	. The input data in this tab was processed through the f	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5				_	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10084	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10081
10085	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10082
10086	34-SoCal_Metals (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10083
10087	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10084
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	2315526.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10085
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10086
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10087
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10088
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10089
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10091
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10092
	34-SoCal_Metals (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10093
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10094
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10095
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10096
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10097
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10098
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10099
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10101
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10102
	34-SoCal_Metals (HighAmbitious_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10103
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10104
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10105
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10106
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10107
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10108
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10109
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10111
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10112
	34-SoCal_Metals (HighAmbitious_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10113
	34-SoCal_Metals (HighAmbitious_ECOvens) 34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10114 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10115
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10115 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10116
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10116 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10117
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10117 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10118
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10118 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10119
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10121
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10121 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10122
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10122 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10123
	34-SoCal_Metals (HighAmbitious_ECOvens)	2042_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10125 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10124
	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG 2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10124 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10125
	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG 2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10125 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10126
10129	124-200ai Merais (HighAmbirious Ecovens)	2043_HZ-NU	FID 10 OVETUIL HZ US DIEHU (SCJ/ 100-SCJ)	26.00	ALF 1_OHO_HIUUSIFOW_3_DataFlep_30Caldas.xisx, 1. Data_Flep_Hiuusifiai, Cell Al 10120

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1			•		
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10130	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10127
10131	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	9037683.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10128
10132	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10129
10134	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10131
10135	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10132
10136	34-SoCal_Metals (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10133
10137	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10134
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10135
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10136
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10137
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10138
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10139
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10141
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10142
	34-SoCal_Metals (HighAmbitious_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10143
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10144
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10145
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10146
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10147
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10148
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10149
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10151
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10152
	34-SoCal_Metals (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10153
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10294
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10295
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10296
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10297
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10298
_	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10299
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10301
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG 2030_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10302 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10303
	35-SoCal_Metals (HighAmbitious_ICEngines)	2030_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		
	35-SoCal_Metals (HighAmbitious_ICEngines)		PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10304
	35-SoCal_Metals (HighAmbitious_ICEngines) 35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG 2031_H2-NG	PRJ H 2 Demana (MMBLU/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10305 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10306
<u> </u>	35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG 2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10306 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10307
	35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG 2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10307 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10308
	35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG 2031_H2-NG	O2 Percent (scf/100-scf)		
	35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG 2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10309 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10311
	35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG 2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		
	-	-			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10312
10316	35-SoCal_Metals (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10313

Tab Contents				
"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_F	rep_Industrial" tak	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
Industrial GHG Calc" to produce the results in "4. Calculatio	ns".			
In this workbook, the terms "Low", "Mid", and "High" corre	spond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
Equipment ID	Fuel Type	Parameter	Value	Reference
35-SoCal_Metals (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10314
35-SoCal_Metals (HighAmbitious_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	1393143.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10315
35-SoCal_Metals (HighAmbitious_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10316
35-SoCal_Metals (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10317
35-SoCal_Metals (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	8173460.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10318
		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10319
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10321
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10322
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10323
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10324
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10325
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10326
1				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10327
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10328
1				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10329
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10331
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10332
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10333
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10334
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10335
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10336
		· · ·		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10337
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10338 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10339
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10359 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10341
1				ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10341 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10342
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10343
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10344
1				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10345
.				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10346
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10347
1				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10348
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10349
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10351
1				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10352
1				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10353
35-SoCal_Metals (HighAmbitious_ICEngines)				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10354
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10355
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10356
•				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10357
35-SoCal_Metals (HighAmbitious_ICEngines)	_ 2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10358
.	-			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10359
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P Industrial GHG Calc" to produce the results in "4. Calculation In this workbook, the terms "Low", "Mid", and "High" correst the season of the sea	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tat Industrial GHG Calc" to produce the results in "4. Calculations". In this workbook, the terms "Low", "Mid", and "High" correspond to the "Cons Equipment ID 35-SoCal_Metals (HighAmbitious_ICEngines) 35-SoCal_	FALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the Industrial GHG Cale" to produce the results in "4. Calculations". In this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenarial to this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenarial to the "Conservative", "Moderate", and "Ambitious (MMBtu/vr) and "Conservative", "Moderate", and "Ambitious (Conservative", "Moderate and "Conservative", "Moderate", and "Ambitious (Conservative", "Moderate", and "Ambitious (MmBtu/vr) and "Conservative", "Moderate "Ambitious (MmBtu/vr) and "Conservative", "Mo	APPL GHG Industrion 3.1 EQ Industrial 1.5

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	1.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10364	35-SoCal_Metals (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10361
10365	35-SoCal_Metals (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10362
10366	35-SoCal_Metals (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10363
10367	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10364
<u> </u>	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	2066909.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10365
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10366
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10367
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10368
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10369
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10371
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10372
	35-SoCal_Metals (HighAmbitious_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10373
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10374
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10375
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10376
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10377
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10378
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10379
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10381
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10382
	35-SoCal_Metals (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10383
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10384
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10385
<u> </u>	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10386
-	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10387
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10388
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10389
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10391
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10392
	35-SoCal_Metals (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10393 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10394
	35-SoCal_Metals (HighAmbitious_ICEngines) 35-SoCal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10394 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10395
	35-SoCal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10395 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10396
	35-socal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10390 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10397
	35-SoCal Metals (HighAmbitious ICEngines)	2040_H2-NG 2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10397 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10398
	35-SoCal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10398 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10399
	35-SoCal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10399 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10401
	35-SoCal_Metals (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10401 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10402
	35-socal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10402 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10403
	35-socal_Metals (HighAmbitious_ICEngines)	2040_H2-NG 2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10403 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10404
	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10404 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10405
	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10405 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10406
10405	199-300ai inierais (Hildinallinirions Incelligilles)	ZU41_NZ-NU	F 10 /0 OVETUII 112 US DIEITU (SCJ/ 100-SCJ)	30.00	ALF 1_OHO_Huustrow_3_DataFlep_30Caldas.xisx, 1. Data_Flep_Huustriai, Cell AT10406

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2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10410	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10407
	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	8825510.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10408
10412	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10409
		2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10411
	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10412
	35-SoCal_Metals (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10413
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10414
		2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10415
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10416
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10417
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10418
		2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10419
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10421
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10422
	35-SoCal_Metals (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10423
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10424
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10425
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10426
	35-SoCal_Metals (HighAmbitious_ICEngines) 35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG 2043_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10427
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG 2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10428 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10429
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10429 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10431
		2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10431 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10432
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10433
	35-SoCal_Metals (HighAmbitious_ICEngines)	2043_112 NG 2044 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10434
	35-SoCal_Metals (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10435
		2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10436
		2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10437
	35-SoCal_Metals (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10438
		2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10439
		2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10441
		2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10442
	35-SoCal_Metals (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10443
		2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10444
		_ 2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10445
	4	_ 2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10446
	35-SoCal_Metals (HighAmbitious_ICEngines)	_ 2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10447
		_ 2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10448
		_ 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10449
	35-SoCal_Metals (HighAmbitious_ICEngines)	_ 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10451
	35-SoCal_Metals (HighAmbitious_ICEngines)	_ 2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10452
	35-SoCal_Metals (HighAmbitious_ICEngines)	_ 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10453
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10597	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10594
10598	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	1098762.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10595
10599	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10596
10600	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10597
10601	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	8124751.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10598
10602	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10599
10604	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10601
10605	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10602
10606	36-SoCal_Metals (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10603
10607	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10604
10608	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	1250252.80	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10605
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10606
10610	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10607
10611	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	8155346.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10608
10612	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10609
10614	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10611
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10612
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10613
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10614
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10615
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10616
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10617
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10618
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10619
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10621
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10622
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10623
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10624
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10625
_	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10626
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10627
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10628
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10629
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10631
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10632
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10633
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10634
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10635
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10636
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10637
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10638
10642	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10639

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10644	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10641
10645	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10642
10646	36-SoCal_Metals (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10643
10647	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10644
10648	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	1801052.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10645
10649	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10646
10650	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10647
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10648
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10649
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10651
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10652
10656	36-SoCal_Metals (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10653
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10654
10658	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	1938399.29	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10655
10659	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10656
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10657
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10658
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10659
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10661
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10662
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10663
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10664
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10665
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10666
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10667
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10668
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10669
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10671
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10672
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10673
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10674
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10675
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10676
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10677
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10678
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10679
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10681
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10682
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10683
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10684
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10685
10689	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10686

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	The input data in this tab was processed through the fo	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspon	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	S.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10690	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10687
10691	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	8635097.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10688
10692	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10689
10694	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10691
<u> </u>	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10692
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10693
		2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10694
		2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10695
		2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10696
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10697
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10698
		2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10699
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10701
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10702
		2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10703
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10704
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10705
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10706
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10707
		2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10708
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10709
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10711
-		2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10712
<u> </u>	36-SoCal_Metals (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10713
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10714
	36-SoCal_Metals (HighAmbitious_ICTurbines) 36-SoCal Metals (HighAmbitious ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10715
	4	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10716
	-	2042_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10717 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT10718
		2042_H2-NG 2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10718 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10719
		2042_H2-NG 2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10719 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10721
	-	2042_H2-NG 2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10721 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10722
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2042_H2-NG 2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10722 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10723
		2042_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10723 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10724
		2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10725
		2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10725 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10726
		2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10727
		2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10728
		2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10729
		2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10731
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10732
	36-SoCal_Metals (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10733
10/30	130 300ai_Mctais (HighAllibitious_ICTulbilles)	2073_112-110	NO NZO EL (INT. NZO) WIIVIDIU)	0.00	ALI I_GIIG_IIIGGSG GW_3_DGGGI GGS.KISK, I. DGGG_FTEP_IIIGGSGIGG, CEILATIO/33

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1		•	•		
2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10737	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10734
10738	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	2925413.56	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10735
10739	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10736
10740	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10737
10741	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	9136463.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10738
10742	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10739
10744	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10741
10745	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10742
10746	36-SoCal_Metals (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10743
10747	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10744
10748	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	3034179.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10745
10749	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10746
10750	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10747
10751	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	9220600.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10748
10752	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10749
10754	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10751
10755	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10752
10756	36-SoCal_Metals (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10753
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10894
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10895
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10896
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10897
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10898
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10899
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10901
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10902
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10903
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10904
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10905
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10906
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10907
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10908
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10909
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10911
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10912
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10913
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10914
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10915
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10916
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10917
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10918
10922	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10919

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10921
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10922
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10923
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10924
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10925
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10926
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10927
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10928
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10929
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10931
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10932
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10933
_	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10934
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10935
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10936
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MAMPtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10937
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral) 37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG 2034_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10938 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10939
	37-SoCal_StoneGlassCement (LowConservative_EcGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10939 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10941
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10942
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10943
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10944
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10945
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10946
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035 H2-NG	Blend % H2 (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT10947
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10948
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10949
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10951
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10952
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	_ 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10953
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	_ 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10954
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	_ 2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10955
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10956
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10957
1096	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	22990822.64	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10958
10962	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10959
1096	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10961
1096	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10962
1096	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10963
1096	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10964
10968	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	4212593.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10965
10969	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10966

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1		<u>_</u>			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
10970	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10967
10971	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	23508695.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10968
10972	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10969
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10971
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10972
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10973
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10974
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10975
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10976
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10977
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10978
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10979
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10981
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10982
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10983
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10984
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10985
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10986
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10987
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10988
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral) 37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10989 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10991
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10991 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10992
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10992 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10993
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2039_112-NG 2040 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG Industrow_3_DataPrep_SocalGas.xisx, 1. Data_Prep_Industrial, Cell AT10994
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10995
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10996
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10997
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10998
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT10999
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11001
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11002
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11003
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11004
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11005
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11006
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11007
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11008
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11009
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11011
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11012
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11013
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11017	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11014
11018	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	4978431.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11015
11019	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11016
11020	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11017
11021	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	21264931.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11018
11022	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11019
11024	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11021
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11022
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11023
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11024
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11025
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11026
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11027
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11028
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11029
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11031
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11032
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11033
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11034
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11035
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11036
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11037
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11038
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11039
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11041
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11042
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11043
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11044
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11045
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11046
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11047
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral) 37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11048 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11049
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	37-SoCal_StoneGlassCement (LowConservative_ECGeneral) 37-SoCal StoneGlassCement (LowConservative ECGeneral)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11051 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11052
	37-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11052 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11053
	38-SoCal_StoneGlassCement (LowConservative_ECGeneral)	2045_H2-NG 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11055 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11194
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG 2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11194 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11195
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11195 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11196
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG 2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11196 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11197
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11198 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11198
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11199 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11199
11202	[20-20-cai_2tone-diass-centent (cowconservative_ccovens)	2030_02-110	02 Fertent (36)/100-36)/	19.00	ALF 1_GITG_ITIGUSTEGW_3_DataFTEP_30CalGas.xisx, 1. Data_FTEP_ITIGUSTITAI, CEILAT11199

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11204	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11201
11205	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11202
11206	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11203
11207	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11204
11208	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	2729714.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11205
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11206
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11207
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11208
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11209
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11211
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11212
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11213
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11214
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11215
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11216
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11217
_	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11218
_	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11219
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11221
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11222
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11223
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11224
_	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11225
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11226
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11227
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11228
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11229
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11231
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11232
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11233
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11234
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11235
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11236
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11237
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11238
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11239
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11241
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11242
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2034_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11243
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11244
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11245
11249	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11246

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11250	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11247
1125	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	23554614.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11248
11252	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11249
11254	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11251
11255	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11252
11256	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11253
11257	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11254
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11255
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11256
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11257
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11258
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11259
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11261
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11262
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11263
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11264
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11265
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11266
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11267
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11268
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11269
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11271
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11272
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11273
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11274
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11275
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11276
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11277
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11278
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11279
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11281
	38-SoCal_StoneGlassCement (LowConservative_ECOvens) 38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG 2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11282 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11283
	7 38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2038_H2-NG 2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11284
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11285
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11286 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11286
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11280 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11287
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11288 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11288
	2 38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11289
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11289 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11291
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11291 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11292
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11292 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11293
11230	730 300al_stolicGlassCellielit (LowCollselvative_LCOVells)	2033_112-110	NO NZO LI (IVIT NZO) IVIIVIDIU)	0.00	ALI 1_GITG_ITIGUSU GW_5_DUCUI TCP_30CalGas.xisx, 1. Data_rTcP_ITIGUSUTal, Cell AT11235

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1		•		•	
2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	ndustrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	_			
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenar	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11297	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11294
11298	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	4709259.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11295
11299	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11296
11300	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11297
11301	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	21860728.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11298
11302	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11299
11304	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11301
11305	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11302
11306	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11303
11307	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11304
11308	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	4849740.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11305
11309	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11306
11310	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11307
11311	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	21600044.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11308
11312	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11309
11314	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11311
11315	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11312
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11313
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11314
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	4978431.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11315
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11316
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11317
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11318
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11319
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11321
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11322
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11323
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11324
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11325
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11326
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11327
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11328
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11329
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11331
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11332
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11333
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11334
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11335
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11336
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11337
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11338
11342	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11339

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11344	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11341
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11342
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11343
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11344
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11345
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11346
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11347
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11348
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11349
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11351
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11352
	38-SoCal_StoneGlassCement (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11353
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11494
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11495
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11496
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11497
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11498
	39-SoCal_StoneGlassCement (LowConservative_ICEngines) 39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11499 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11501
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11501 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11502
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11503
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11504
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11505
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11506
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT11507
	39-SoCal StoneGlassCement (LowConservative ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11508
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11509
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11511
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11512
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11513
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11514
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11515
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11516
11520	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11517
11521	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	23850978.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11518
11522	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11519
11524	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11521
11525	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11522
11526	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11523
11527	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11524
11528	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	3310783.75	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11525
11529	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11526

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1		<u>_</u>			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11530	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11527
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	23430630.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11528
11532	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11529
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11531
—	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11532
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11533
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11534
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11535
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11536
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11537
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11538
_	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11539
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11541
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11542
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11543
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11544
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11545
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11546
	39-SoCal_StoneGlassCement (LowConservative_ICEngines) 39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11547
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11548 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11549
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11551 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11551
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_batarrep_socalGas.xisx, 1. Data_rrep_industrial, Cell AT11551 ALP1_GHG_Industrow_3_batarrep_socalGas.xisx, 1. Data_rrep_industrial, Cell AT11552
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_batarrep_socalGas.xisx, 1. Data_rrep_industrial, Cell AT11553 ALP1_GHG_Industrow_3_batarrep_socalGas.xisx, 1. Data_rrep_industrial, Cell AT11553
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT11554
	39-SoCal StoneGlassCement (LowConservative ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11555
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11556
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11557
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11558
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT11559
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11561
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11562
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11563
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11564
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11565
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11566
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11567
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11568
11572	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11569
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11571
11575	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11572
11576	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11573
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11577	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11574
11578	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11575
11579	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11576
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11577
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11578
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11579
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11581
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11582
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11583
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11584
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11585
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11586
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11587
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11588
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11589
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11591
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11592
-	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11593
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11594
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11595
	39-SoCal_StoneGlassCement (LowConservative_ICEngines) 39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11596 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11597
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG 2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11597 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11598
-	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG 2040_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11598 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11599
	39-SoCal StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG 2040 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11601
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11601 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11602
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11603
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2040_H2-NG 2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11604
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11605
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11606
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11607
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11608
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11609
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11611
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11612
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11613
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11614
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11615
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11616
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11617
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11618
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11619
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11621
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11622
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11623
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11624
—	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11625
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11626
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11627
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11628
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11629
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11631
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11632
—	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11633
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11634
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11635
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11636
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11637
	39-SoCal_StoneGlassCement (LowConservative_ICEngines) 39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11638 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11639
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11639 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11641
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11642
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11643
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11644
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11645
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11646
	39-SoCal StoneGlassCement (LowConservative ICEngines)	2045 H2-NG	Blend % H2 (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT11647
	39-SoCal StoneGlassCement (LowConservative ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11648
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11649
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11651
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11652
	39-SoCal_StoneGlassCement (LowConservative_ICEngines)	_ 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11653
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	_ 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11794
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	_ 2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11795
11799	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11796
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11797
11801	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	23343391.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11798
11802	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11799
11804	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11801
11805	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11802
11806	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11803
11807	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11804
11808	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	2729714.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11805
11809	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11806

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2	Tab Contents	1			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11810	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11807
11811	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	23837736.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11808
11812	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11809
11814	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11811
11815	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11812
11816	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11813
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11814
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11815
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11816
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11817
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11818
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11819
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11821
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11822
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11823
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11824
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11825
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11826
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11827
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11828
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11829
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11831
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11832
-	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11833
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11834
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11835
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11836
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11837
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11838
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11839
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11841
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11842
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11843
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11844
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11845
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11846
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11847
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11848
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11849
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11851
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11852
11856	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11853

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11857	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11854
11858	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	4016291.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11855
11859	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11856
11860	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11857
11861	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	22990822.64	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11858
11862	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11859
11864	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11861
11865	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11862
11866	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11863
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11864
11868	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	4212593.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11865
11869	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11866
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11867
11871	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	23508695.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11868
11872	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11869
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11871
_	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11872
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11873
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11874
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11875
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11876
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11877
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11878
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11879
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11881
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11882
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11883
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11884
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11885
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11886
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11887
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11888
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11889
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11891
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11892
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11893
<u> </u>	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11894
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11895
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11896
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11897
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11898
11902	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11899

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tak	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.]
5					_
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11904	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11901
11905	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11902
11906	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11903
11907	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11904
11908	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	4849740.27	' ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11905
11909	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11906
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11907
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11908
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11909
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11911
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11912
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11913
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11914
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11915
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11916
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11917
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11918
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11919
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11921
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11922
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11923
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11924
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11925
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11926
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11927
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11928
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11929
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11931
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11932
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11933
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11934
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11935
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11936
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11937
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11938
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11939
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11941
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11942
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2044_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11943
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11944
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11945
11949	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11946

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
11950	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11947
	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	20615033.34	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11948
11952	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11949
11954	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11951
11955	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11952
11956	40-SoCal_StoneGlassCement (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT11953
12097	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12094
12098	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	2495422.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12095
12099	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12096
12100	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12097
12101	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	23343391.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12098
12102	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12099
12104	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12101
12105	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12102
12106	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12103
12107	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12104
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	2916764.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12105
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12106
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12107
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12108
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12109
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12111
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12112
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12113
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12114
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12115
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12116
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12117
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12118
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12119
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12121
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12122
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2032_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12123
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12124
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12125
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12126
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12127
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12128
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12129
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12131
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12132
12136	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12133

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12137	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12134
12138	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	3886875.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12135
12139	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12136
12140	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12137
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	23670003.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12138
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12139
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12141
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12142
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12143
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12144
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12145
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12146
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12147
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12148
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12149
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12151
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12152
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12153
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12154
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12155
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12156
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12157
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12158
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12159
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12161
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12162
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12163
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral) 41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12164
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12165 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12166
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12100 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12167
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12167 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12168
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12169 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12169
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12109 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12171
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12171 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12172
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12172 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12173
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2037_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12174 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12174
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12175
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12176 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12176
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12177 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12177
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12178
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12179 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12179
12102	11 30001 Storie Grassectricit (Wild Woder ate_Ledeneral)	2030_112-110	02 i creent (36)/ 100 36)/	3.00	7.E. 1_5.15_industriom_5_butti rep_50carbas.nish, 1. butta_1 rep_industrial, cen A112175

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tak	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12184	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12181
12185	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12182
12186	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12183
12187	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12184
12188	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	4964382.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12185
12189	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12186
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12187
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12188
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12189
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12191
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12192
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12193
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12194
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12195
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12196
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12197
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12198
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12199
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12201
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12202
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12203
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12204 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12205
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral) 41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG 2041_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12205 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12206
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG 2041 H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12207 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12207
	41-SoCal StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12208 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12208
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12209 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12209
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12211
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12212
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12213
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12214
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12215
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12216
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12217
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	_ 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12218
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12219
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12221
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12222
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12223
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	_ 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12224
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	_ 2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12225
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12226
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5	,				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12230	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12227
12231	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	21023548.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12228
12232	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12229
12234	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12231
12235	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12232
12236	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12233
12237	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12234
12238	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	5549529.69	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12235
12239	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12236
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12237
12241	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	20883826.99	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12238
12242	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12239
12244	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12241
12245	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12242
12246	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12243
12247	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12244
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	5635757.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12245
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12246
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12247
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12248
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12249
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12251
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12252
	41-SoCal_StoneGlassCement (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12253
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12394
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12395
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12396
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12397
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12398
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12399
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12401
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12402
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12403
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12404
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12405
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12406
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MAMPtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12407
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12408
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12409
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12411
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12412
1241	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12413

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12417	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12414
12418	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	3268490.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12415
12419	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12416
12420	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12417
12421	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	23850978.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12418
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12419
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12421
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12422
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12423
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12424
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12425
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12426
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12427
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12428
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12429
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12431
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12432
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12433
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12434
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12435
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12436
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12437
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12438
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12439
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	NG CHA EF (MT CHA/MARRY)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12441
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12442
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12443
	42-SoCal_StoneGlassCement (MidModerate_ECOvens) 42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12444
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12445 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12446
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12440 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12447
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12447 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12448
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12449 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12449
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12451
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12451 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12452
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12452 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12453
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2035_H2-NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12454 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12454
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12455
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12456
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12457
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12458
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12459
12402	1-2 30cai_stolicolassecificit (ivilalviouelate_ccovells)	2030_112-110	02 Tercent (36)/ 100 36)/	19.00	ALI 1_GITG_ITIGUSELOW_S_DUCCHI TEP_SOCCIOUS.AISA, 1. Data_FTEP_ITIGUSETIAI, CEILAT 12435

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"			·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5	, , , , , , , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12464	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12461
12465	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12462
12466	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12463
12467	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12464
12468	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	4702692.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12465
12469	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12466
12470	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12467
12471	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	23508695.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12468
12472	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12469
12474	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12471
12475	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12472
12476	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12473
12477	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12474
12478	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	4865118.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12475
12479	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12476
12480	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12477
12481	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	23079386.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12478
12482	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12479
12484	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12481
12485	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12482
12486	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12483
12487	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12484
12488	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12485
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12486
12490	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12487
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12488
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12489
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12491
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12492
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12493
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12494
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12495
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12496
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12497
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12498
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12499
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12501
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12502
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12503
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12504
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12505
12509	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12506

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12510	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12507
12511	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	21600044.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12508
12512	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12509
12514	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12511
12515	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12512
12516	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12513
12517	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12514
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12515
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12516
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12517
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12518
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12519
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12521
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12522
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12523
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12524
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12525
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12526
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12527
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12528
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12529
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12531
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12532
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12533
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12534
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12535
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12536
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12537
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12538
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12539
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	NG CHA EE (MT CHA/MARH)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12541
	42-SoCal_StoneGlassCement (MidModerate_ECOvens) 42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12542 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12543
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2044_H2-NG			
	-	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12544 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12545
	42-SoCal_StoneGlassCement (MidModerate_ECOvens) 42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2045_H2-NG 2045_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		
	-	2045_H2-NG 2045_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12546
	42-SoCal_StoneGlassCement (MidModerate_ECOvens) 42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12547 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT12548
-			O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12548 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT12549
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12549
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	-			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12551
	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12552
12556	42-SoCal_StoneGlassCement (MidModerate_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12553

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12697	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12694
12698	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	2495422.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12695
12699	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12696
12700	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12697
12701	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	23343391.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12698
12702	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12699
12704	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12701
12705	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12702
12706	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12703
12707	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12704
12708	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	2916764.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12705
12709	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12706
12710	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12707
12711	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	23837736.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12708
12712	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12709
12714	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12711
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12712
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12713
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12714
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12715
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12716
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12717
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12718
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12719
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12721
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12722
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12723
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12724
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12725
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12726
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12727
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12728
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12729
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12731
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12732
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12733
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12734
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12735
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12736
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12737
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12738
12742	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12739

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2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1274	4 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12741
1274	5 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12742
1274	6 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12743
1274	7 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12744
1274	8 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	4163932.52	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12745
1274	9 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12746
1275	0 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12747
1275	1 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	23554614.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12748
1275	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12749
1275	4 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12751
1275	5 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12752
1275	6 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12753
1275	7 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12754
1275	8 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	4338603.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12755
1275	9 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12756
1276	0 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12757
1276	1 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	22990822.64	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12758
1276	2 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12759
1276	4 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12761
1276	5 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12762
1276	6 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12763
1276	7 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12764
1276	8 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	4702692.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12765
1276	9 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12766
1277	0 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12767
1277	1 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	23508695.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12768
1277	2 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12769
1277	4 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12771
1277	5 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12772
1277	6 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12773
1277	7 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12774
1277	8 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	4865118.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12775
1277	9 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12776
1278	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12777
1278	1 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	23079386.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12778
1278	2 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12779
1278	443-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12781
1278	5 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12782
	6 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12783
1278	7 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12784
1278	8 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	4964382.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12785
1278	9 43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12786

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12790	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12787
12791	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	22461695.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12788
12792	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12789
12794	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12791
12795	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12792
12796	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12793
12797	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12794
12798	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	5047647.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12795
12799	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12796
12800	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12797
12801	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	21860728.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12798
12802	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12799
12804	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12801
12805	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12802
12806	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12803
12807	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12804
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	5190274.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12805
12809	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12806
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12807
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12808
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12809
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12811
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12812
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12813
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12814
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12815
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12816
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12817
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12818
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12819
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12821
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12822
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12823
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12824
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12825
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12826
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12827
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12828
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12829
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12831
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12832
12836	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12833

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
12837	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12834
12838	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	5549529.69	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12835
12839	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12836
12840	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12837
12841	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	20883826.99	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12838
12842	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12839
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12841
12845	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12842
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12843
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12844
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12845
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12846
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12847
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12848
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12849
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12851
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12852
	43-SoCal_StoneGlassCement (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12853
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12994
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12995
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12996
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12997
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12998
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12999
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13001
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13002
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13003
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13004
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13005
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13006
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13007
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Percent (ccf/100 ccf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13008
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines) 44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT13009
		2031_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13011
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines) 44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13012 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT13013
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2031_H2-NG 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13013 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13014
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13014 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13015
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG 2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13016 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13017
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)		BSL NG Consumption (MMBtu/yr)		
		2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13018 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT13019
12077	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13019

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13024	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13021
13025	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13022
13026	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13023
13027	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13024
13028	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	3537468.88	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13025
13029	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13026
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13027
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13028
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13029
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13031
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13032
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13033
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13034
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13035
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13036
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13037
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13038
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13039
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13041
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13042
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13043
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13044
-	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13045
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13046
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13047
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13048
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13049
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13051
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13052
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13053
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13054
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13055
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13056
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13057
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13058
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13059 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT13061
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	NG CHA FE (MT CHA/MMRtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13061 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT13063
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13062
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13063 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT13064
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT13064
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13065
13069	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13066

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	nction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	and to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13070	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13067
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13068
13072	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13069
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13071
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13072
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13073
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13074
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13075
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13076
-	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13077
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13078
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13079
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13081
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13082
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13083
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13084
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13085
_	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13086
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13087
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13088
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13089
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13091
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13092
_	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13093
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13094
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13095
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13096
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13097
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13098
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13099
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13101
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13102
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13103
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13104
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13105
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13106
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13107
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13108
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13109
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13111
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13112
13116	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13113

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p Industrial" tak	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	1
5	<u> </u>				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13117	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13114
13118	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	5299429.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13115
13119	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13116
13120	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13117
13121	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	21264931.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13118
13122	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13119
13124	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13121
13125	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13122
13126	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13123
13127	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13124
13128	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	5417420.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13125
13129	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13126
13130	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13127
13131	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	21023548.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13128
13132	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13129
13134	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13131
13135	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13132
_	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13133
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13134
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13135
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13136
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13137
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13138
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13139
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13141
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13142
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13143
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13144
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13145
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13146
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13147
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13148
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13149
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13151
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13152
	44-SoCal_StoneGlassCement (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13153
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13294
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13295
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13296
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13297
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13298
13302	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13299

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13304	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13301
13305	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13302
13306	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13303
13307	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13304
13308	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	2916764.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13305
<u> </u>	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13306
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13307
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13308
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13309
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13311
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13312
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13313
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13314
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13315
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13316
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13317
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13318
_	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13319
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13321
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13322
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13323
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13324
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13325
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13326
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13327
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13328
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral) 45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13329 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13331
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13331 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13332
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13333 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13333
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2033_H2-NG 2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13334
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13335
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13336
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13337
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13338
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13339
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13341
—	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13342
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13343
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13344
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13345
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13346
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					'
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13347
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	23554614.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13348
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13349
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13351
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13352
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13353
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13354
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	4338603.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13355
1335	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13356
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13357
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	22990822.64	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13358
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13359
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13361
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13362
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13363
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13364
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	4702692.61	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13365
1336	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13366
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13367
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	23508695.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13368
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13369
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13371
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13372
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13373
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13374
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	4865118.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13375
1337	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13376
1338	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13377
1338	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	23079386.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13378
1338	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13379
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13381
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13382
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13383
1338	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13384
1338	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13385
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13386
1339	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13387
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13388
1339	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13389
1339	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13391
1339	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13392
1339	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13393

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13397	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13394
13398	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	5047647.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13395
13399	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13396
13400	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13397
13401	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	21860728.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13398
13402	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13399
13404	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13401
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13402
13406	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13403
13407	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13404
13408	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	5190274.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13405
13409	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13406
13410	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13407
13411	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	21600044.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13408
13412	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13409
13414	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13411
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13412
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13413
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13414
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13415
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13416
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13417
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13418
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13419
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13421
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13422
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13423
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13424
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13425
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13426
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13427
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13428
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13429
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13431
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13432
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13433
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13434
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13435
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13436
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13437
	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13438
13442	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13439

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5	, , , , , , , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13444	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13441
13445	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13442
13446	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13443
13447	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13444
13448	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	5635757.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13445
13449	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13446
13450	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13447
13451	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	20615033.34	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13448
13452	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13449
13454	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13451
13455	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13452
13456	45-SoCal_StoneGlassCement (HighAmbitious_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13453
13597	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13594
13598	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	2495422.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13595
13599	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13596
13600	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13597
13601	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	23343391.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13598
13602	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13599
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13601
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13602
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13603
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13604
-	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13605
-	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13606
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13607
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13608
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13609
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13611
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13612
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13613
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13614
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13615
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13616
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13617
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13618
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13619
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13621
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13622
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13623
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13624
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13625
13629	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13626

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2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13630	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13627
13631	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	23430630.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13628
13632	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13629
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13631
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13632
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13633
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13634
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13635
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13636
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13637
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13638
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13639
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13641
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13642
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13643
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13644
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13645
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13646
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens) 46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13647
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13648 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13649
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13649 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13651
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_batarrep_socalGas.xisx, 1. Data_rrep_industrial, Cell AT13652
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2035_H2-NG 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_bataPrep_SocalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13653
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13654
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13655
	46-SoCal StoneGlassCement (HighAmbitious ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13656
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13657
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13658
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT13659
	46-SoCal StoneGlassCement (HighAmbitious ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13661
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13662
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13663
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	_ 2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13664
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	_ 2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13665
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	_ 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13666
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	_ 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13667
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13668
13672	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13669
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13671
13675	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13672
13676	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13673
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation:	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	oond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13677	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13674
13678	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	4865118.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13675
13679	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13676
13680	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13677
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	23079386.92	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13678
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13679
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13681
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13682
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13683
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13684
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13685
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13686
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13687
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13688
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13689
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13691
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13692
_	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13693
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13694
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13695
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13696
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13697
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13698
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13699
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	NG CUA FF (MT CUA MARRY)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13701
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13702
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13704
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13705
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens) 46-SoCal StoneGlassCement (HighAmbitious ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13705
		2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13706
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13707
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens) 46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG 2041_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13708 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13709
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13719 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13711
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13711 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13712
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13712 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13713
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2041_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13713 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13714
-	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13714 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13715
-	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13716 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13716
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13710 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13717
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13717 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13718
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG 2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13718 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13719
13/22	40-20cai_2tollegiasscellielit (Likilyllinitions_ecovelis)	2042_02-110	02 FETCETT (3CJ/ 100-3CJ)	13.00	ALT 1_GITG_ITIGUSTEOW_3_DataFTEP_30CalGas.AlsX, 1. Data_FTEP_ITIGUSTEIAI, Cell AT 13/13

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	···			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13724	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13721
13725	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13722
13726	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13723
13727	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13724
13728	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	5417420.28	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13725
13729	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13726
13730	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13727
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	21023548.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13728
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13729
13734	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13731
_	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13732
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13733
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13734
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13735
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13736
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13737
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13738
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13739
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13741
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13742
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13743
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13744
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13745
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13746
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13747
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13748
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13749
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13751
	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13752
_	46-SoCal_StoneGlassCement (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13753
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13894
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13895
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13896
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13897
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13898
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13899
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13901
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13902
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13903
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13904
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13905
13909	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	/6.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13906

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1					
2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_		_	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13910	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13907
13911	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	23837736.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13908
13912	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13909
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13911
13915	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13912
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13913
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13914
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13915
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13916
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13917
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13918
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13919
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13921
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13922
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13923
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13924
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13925
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13926
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13927
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13928
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13929
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13931
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13932
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13933
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13934
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13935
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13936
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtw/vr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13937
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines) 47-SoCal StoneGlassCement (HighAmbitious ICEngines)	2034_H2-NG 2034_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13938 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13939
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines) 47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13939 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13941
	1	2034_H2-NG 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13942 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT13943
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines) 47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2034_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13943 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13944
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13944 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13945
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13945 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13946
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13946 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13947
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13947 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13948
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13948 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13949
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13949 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13951
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13951 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13952
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13952 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13953
13930	147 20001 2001601033061116111 (HIKHAHIDILIOUS_ICEHKII165)	2033_112-110	ING INZO LI (INIT INZO/ININIBLU)	0.00	TEL T_OLIO_IIIGUSTI OW_3_Datar Tep_30Caldas.xisx, T. Data_rTep_IIIGUSTI Idi, Cell Al 15355

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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
13957	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13954
13958	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	4338603.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13955
13959	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13956
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13957
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13958
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13959
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13961
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13962
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13963
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13964
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13965
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13966
-	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13967
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13968
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13969
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13971
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13972
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13973
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines) 47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2038_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13974
	47-socal_stoneGlassCement (HighAmbitious_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13975 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13976
	47-socal_stoneGlassCement (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13970 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13977
	47-SoCal StoneGlassCement (HighAmbitious ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13978 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13978
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13979 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13979
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2038 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT13981
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13982
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13983
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13984
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13985
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT13986
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13987
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13988
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13989
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	_ 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13991
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	_ 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13992
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	_ 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13993
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	_ 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13994
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13995
13999	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13996
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13997
14001	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	21860728.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13998
14002	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT13999
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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14004	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14001
14005	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14002
14006	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14003
14007	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14004
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	5190274.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14005
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14006
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14007
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14008
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14009
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14011
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14012
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14013
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14014
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14015
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14016
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14017
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14018
_	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14019
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14021
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14022
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14023
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14024
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14025
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14026
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14027
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14028
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14029
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines) 47-SoCal StoneGlassCement (HighAmbitious ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14031
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2043_H2-NG 2043_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14032
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG 2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14033 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14034
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14034 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14035
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14036 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14036
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14030 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14037
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14037 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14038
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14039 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14039
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14039 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14041
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14041 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14042
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14042 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14043
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14043 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14044
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14044 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14045
	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14045 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14046
14049	- 1 200ai 210Heolasseement (HighAmbitions Trengines)	2043_112-110	Tho 70 Overall Hz as Bletia (Scj/ 100-Scj)	20.00	ALI 1_0110_IIIUUSII 0W_3_Datar 1EP_30CalQas.AlsA, 1. Data_FIEP_IIIUUSII lai, Cell Al 14040

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14050	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14047
14051	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	20615033.34	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14048
14052	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14049
14054	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14051
14055	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14052
14056	47-SoCal_StoneGlassCement (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14053
14197	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14194
14198	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	2495422.15	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14195
14199	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14196
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14197
14201	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	23343391.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14198
14202	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14199
14204	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14201
14205	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14202
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14203
14207	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14204
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	2916764.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14205
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14206
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14207
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14208
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14209
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14211
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14212
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14213
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14214
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14215
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14216
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14217
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14218
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14219
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14221
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14222
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14223
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14224
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14225
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14226
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14227
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14228
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14229
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14231
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14232
14236	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14233

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14237	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14234
14238	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	3886875.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14235
14239	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14236
14240	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14237
14241	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	23670003.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14238
14242	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14239
14244	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14241
14245	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14242
14246	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14243
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14244
14248	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	4163932.52	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14245
14249	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14246
14250	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14247
14251	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	23554614.35	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14248
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14249
14254	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14251
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14252
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14253
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14254
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14255
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14256
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14257
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14258
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14259
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14261
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14262
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14263
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14264
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14265
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14266
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14267
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14268
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14269
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14271
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14272
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14273
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14274
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14275
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14276
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14277
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14278
14282	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14279

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14284	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14281
14285	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14282
14286	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14283
14287	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14284
14288	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	4964382.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14285
14289	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14286
14290	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14287
14291	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	22461695.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14288
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14289
14294	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14291
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14292
14296	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14293
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14294
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14295
14299	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14296
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14297
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14298
_	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14299
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14301
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14302
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14303
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14304
_	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14305
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14306
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14307
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14308
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14309
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14311
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14312
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14313
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14314
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14315
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14316
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14317
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14318
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14319
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14321
-	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14322
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14323
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14324
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14325
14329	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14326

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14330	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14327
14331	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14328
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14329
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14331
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14332
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14333
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14334
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14335
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14336
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14337
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14338
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14339
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14341
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14342
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14343
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14344
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14345
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14346
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines) 48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14347
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14348 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14349
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14351 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14351
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14351 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14352
	48-SoCal_StoneGlassCement (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14353 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14353
	49-SoCal_Paper (LowConservative_ECGeneral)	2030 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14494
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14495
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14496
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14497
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14498
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14499
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14501
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14502
	49-SoCal_Paper (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14503
	49-SoCal_Paper (LowConservative_ECGeneral)	_ 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14504
	49-SoCal_Paper (LowConservative_ECGeneral)	_ 2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14505
14509	49-SoCal_Paper (LowConservative_ECGeneral)	_ 2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14506
	49-SoCal_Paper (LowConservative_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14507
	49-SoCal_Paper (LowConservative_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14508
14512	49-SoCal_Paper (LowConservative_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14509
14514	49-SoCal_Paper (LowConservative_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14511
14515	49-SoCal_Paper (LowConservative_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14512
14516	49-SoCal_Paper (LowConservative_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14513
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_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14517
_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14518
_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14519
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_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14536 _DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14539
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_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14544
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DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14559

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14564	49-SoCal_Paper (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14561
14565	49-SoCal_Paper (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14562
14566	49-SoCal_Paper (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14563
14567	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14564
14568	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	587741.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14565
14569	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14566
14570	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14567
	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14568
	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14569
	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14571
	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14572
	49-SoCal_Paper (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14573
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14574
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14575
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14576
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14577
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14578
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14579
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14581
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14582
	49-SoCal_Paper (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14583
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14584
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14585
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14586
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14587
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14588
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14589
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14591
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14592
	49-SoCal_Paper (LowConservative_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14593
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14594
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14595
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14596 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14597
	49-SoCal_Paper (LowConservative_ECGeneral) 49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xisx, 1. Data_Prep_Industrial, Cell AT14597 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xisx, 1. Data_Prep_Industrial, Cell AT14598
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14598 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14599
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14599 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14601
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		
	49-SoCal_Paper (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14602 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14603
		2040_H2-NG 2041_H2-NG			
	49-SoCal_Paper (LowConservative_ECGeneral)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14604
	49-SoCal_Paper (LowConservative_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (scf/100 scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14605
14609	49-SoCal_Paper (LowConservative_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14606

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14610	49-SoCal_Paper (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14607
	49-SoCal_Paper (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	6052998.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14608
14612	49-SoCal_Paper (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14609
		2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14611
		2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14612
	49-SoCal_Paper (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14613
		2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14614
		2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14615
	•	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14616
	49-SoCal_Paper (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14617
	49-SoCal_Paper (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14618
		2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14619
	1	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14621
	49-SoCal_Paper (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14622
		2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14623
	-	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14624
	49-SoCal_Paper (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14625
	49-SoCal_Paper (LowConservative_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14626
		2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14627
		2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14628
	49-SoCal_Paper (LowConservative_ECGeneral) 49-SoCal_Paper (LowConservative_ECGeneral)	2043_H2-NG 2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14629 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14631
	•	2043_H2-NG 2043_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14631 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14632
	49-SoCal_Paper (LowConservative_ECGeneral)	2043_H2-NG 2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14633 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14633
	49-SoCal_Paper (LowConservative_ECGeneral)	2043_112-NG 2044 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14634
	49-SoCal Paper (LowConservative ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14635
	_ · · · <i>_</i> /	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14636
	-	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14637
	•	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14638
	-	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14639
	-	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14641
	<u> </u>	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14642
		2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14643
		2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14644
		2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14645
	-	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14646
	-	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14647
		2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14648
		2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14649
		2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14651
	•	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14652
	49-SoCal Paper (LowConservative ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14653
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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspon	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
14844	50-SoCal_Paper (LowConservative_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14841
	50-SoCal_Paper (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14842
	50-SoCal_Paper (LowConservative_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14843
	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14844
	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14845
	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14846
	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14847
		2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14848
	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14849
	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14851
_	50-SoCal_Paper (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14852
		2035_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14853
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14854
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14855
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14856
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14857
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14858
	50-SoCal_Paper (LowConservative_ECOvens) 50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14859 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14861
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14862
	50-SoCal_Paper (LowConservative_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14863
	50-SoCal_Paper (LowConservative_ECOvens)	2030_H2 NG 2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14864
	•	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14865
	50-SoCal_Paper (LowConservative_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14866
	50-SoCal_Paper (LowConservative_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT14867
	50-SoCal_Paper (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14868
	-	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14869
	50-SoCal_Paper (LowConservative_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14871
	50-SoCal Paper (LowConservative ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14872
	_ · · · · _ · ·	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14873
	-	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14874
	<u> </u>	_ 2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14875
	50-SoCal_Paper (LowConservative_ECOvens)	_ 2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14876
	<u> </u>	_ 2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14877
14881	50-SoCal_Paper (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	5923642.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14878
14882	-	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14879
14884	50-SoCal_Paper (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14881
		2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14882
14886	50-SoCal_Paper (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14883
14887	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14884
14888	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	648497.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14885
14889	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14886

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
14890	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14887
14893	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	5977376.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14888
14892	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14889
14894	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14891
14895	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14892
14896	50-SoCal_Paper (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14893
14897	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14894
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14895
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14896
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14897
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	6013235.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14898
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14899
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14901
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14902
	50-SoCal_Paper (LowConservative_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14903
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14904
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14905
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14906
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14907
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14908
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14909
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14911
	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14912
<u> </u>	50-SoCal_Paper (LowConservative_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14913
	750-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14914
	50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14915
	50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14916
	50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14917
	50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14918
	50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14919
	50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14921
	50-SoCal_Paper (LowConservative_ECOvens) 50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14922 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14923
	7 50-SoCal_Paper (LowConservative_ECOvens)	2042_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		
	S 50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14924 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14925
	50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14925 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14926
	50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14926 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14927
	50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14927 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14928
	2 50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	O2 Percent (scf/100-scf)		
	50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14929 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14931
	50-SoCal_Paper (LowConservative_ECOvens)	2043_H2-NG 2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14931 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14932
	50-SoCal_Paper (LowConservative_ECOvens)	_	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14932 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14933
14330	plac-accai_raper (cowconservative_ccovens)	2043_H2-NG	INO INZO LE (IVIT INZO/IVIIVIDLU)	0.00	ALT 1_GITG_ITIGUSTFOW_3_DataFTEP_30CatGas.xisx, 1. Data_FTEP_ITIGUSTFIAI, Cell AT 14955

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	o".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1493	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14934
14938	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	846910.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14935
14939	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14936
14940	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14937
	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	6201573.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14938
	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14939
_	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14941
	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14942
	50-SoCal_Paper (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14943
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14944
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14945
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14946
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14947
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14948
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14949
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14951
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14952
	50-SoCal_Paper (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT14953
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15094
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15095
	51-SoCal_Paper (LowConservative_ICEngines) 51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15096
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15097
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG 2030_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15098 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15099
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15101 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15101
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15101 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15102
	51-SoCal_Paper (LowConservative_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15103
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15104
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15105
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15106
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15107
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15108
_	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15109
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15111
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15112
	51-SoCal_Paper (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15113
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15114
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15115
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15116
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15117
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15118
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15119

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2	Tab Contents		· · · · · · · · · · · · · · · · · · ·		
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pi	ep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons			
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15121
15125	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15122
	51-SoCal_Paper (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15123
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15124
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15125
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15126
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15127
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15128
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15129
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15131
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15132
	51-SoCal_Paper (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15133
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15134
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15135
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15136
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15137
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15138
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15139
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	NG COLA FF (MT COLA (MANAPELL)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15141
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15142
	51-SoCal_Paper (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15143
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15144 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15145
	51-SoCal_Paper (LowConservative_ICEngines) 51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15145 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15146
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15146 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15147
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15147 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15148
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15149
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15151
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15152
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15153
	51-SoCal_Paper (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15154
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15155
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15156
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15157
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15158
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15159
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15161
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15162
	51-SoCal_Paper (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15163
	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15164
	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15165
	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15166
	T = -1 (- >= -1 (-)			32.00	

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	The input data in this tab was processed through the fo	ınction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspon	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	S.	
5		_		_	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15170	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15167
15171	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	5877382.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15168
15172	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15169
15174	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15171
	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15172
	51-SoCal_Paper (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15173
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15174
		2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15175
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15176
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15177
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15178
		2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15179
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15181
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15182
	51-SoCal_Paper (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15183
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15184
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15185
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15186
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15187
		2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15188
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15189
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15191
		2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15192
	51-SoCal_Paper (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15193
	51-SoCal_Paper (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15194
	51-SoCal_Paper (LowConservative_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15195
		2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15196
		2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15197
		2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15198
		2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15199
		2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15201
		2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15202
		2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15203
		2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15204
		2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15205
		2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15206
		2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15207
		2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15208
		2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15209
		2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15211
	51-SoCal_Paper (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15212
15216	51-SoCal_Paper (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15213

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Property of the control of the	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15217	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15214
15218	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	776020.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15215
15219	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15216
15220	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15217
15221	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	6106848.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15218
15222	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15219
15224	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15221
	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15222
-	51-SoCal_Paper (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15223
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15224
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15225
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15226
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15227
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15228
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15229
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15231
	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15232
_	51-SoCal_Paper (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15233
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15234
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15235
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15236
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15237
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15238
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15239
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15241
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15242
	51-SoCal_Paper (LowConservative_ICEngines)	2044_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15243
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15244
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15245
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15246
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15247
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Percent (ccf/100 ccf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15248
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15249
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15251
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15252
	51-SoCal_Paper (LowConservative_ICEngines)	2045_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15253
	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15394
	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15395
	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15396
	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15397
	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15398
15402	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15399

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5			· · · · · · · · · · · · · · · · · · ·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15404	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15401
15405	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15402
15406	52-SoCal_Paper (LowConservative_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15403
15407	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15404
15408	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	337327.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15405
15409	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15406
15410	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15407
15411	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	5542857.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15408
15412	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15409
15414	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15411
15415	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15412
15416	52-SoCal_Paper (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15413
15417	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15414
15418	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	387262.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15415
15419	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15416
15420	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15417
15421	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	5602424.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15418
15422	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15419
15424	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15421
15425	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15422
15426	52-SoCal_Paper (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15423
15427	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15424
15428	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	433690.04	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15425
15429	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15426
15430	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15427
15431	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	5663959.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15428
15432	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15429
15434	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15431
15435	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15432
15436	52-SoCal_Paper (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15433
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15434
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15435
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15436
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15437
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	5724327.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15438
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15439
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15441
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15442
	52-SoCal_Paper (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15443
	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15444
	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15445
15449	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15446

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15450	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15447
15451	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	5780786.91	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15448
15452	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15449
15454	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15451
15455	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15452
15456	52-SoCal_Paper (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15453
15457	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15454
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15455
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15456
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15457
_	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15458
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15459
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15461
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15462
	52-SoCal_Paper (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15463
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15464
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15465
_	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15466
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15467
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15468
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15469
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15471
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15472
	52-SoCal_Paper (LowConservative_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15473
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15474
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15475
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15476
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15477
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15478
_	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15479
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15481
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15482
	52-SoCal_Paper (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15483
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRI H3 Demand (MMBtu/vr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15484
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Rlend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15485
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15486
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15487
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15488
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15489
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15491
	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15492
15496	52-SoCal_Paper (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15493

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tab	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	pond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15497	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15494
15498	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	694142.41	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15495
15499	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15496
15500	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15497
15501	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	6013235.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15498
15502	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15499
15504	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15501
	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15502
	52-SoCal_Paper (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15503
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15504
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15505
_	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15506
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15507
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15508
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15509
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15511
	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15512
_	52-SoCal_Paper (LowConservative_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15513
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15514
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15515
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15516
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15517
-	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15518
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15519
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15521
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15522
	52-SoCal_Paper (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15523
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15524
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15525
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15526
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15527
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15528
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15529
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15531
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15532
	52-SoCal_Paper (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15533
	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15534
	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15535
	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15536
	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15537
	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15538
15542	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15539

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2	Tab Contents		·		1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15544	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15541
15545	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15542
15546	52-SoCal_Paper (LowConservative_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15543
15547	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15544
_	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	878757.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15545
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15546
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15547
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15548
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15549
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15551
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15552
	52-SoCal_Paper (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15553
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15694
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15695
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15696
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15697
-	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15698
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15699
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15701
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15702
	53-SoCal_Paper (MidModerate_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15703
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15704
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15705
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15706
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15707
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15708
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15709
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15711
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15712
	53-SoCal_Paper (MidModerate_ECGeneral)	2031_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15713
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15714
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15715
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15716
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15717
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15718
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15719
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15721
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15722
	53-SoCal_Paper (MidModerate_ECGeneral)	2032_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15723
	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15724
	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15725
15/29	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	00.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15726

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2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the fo	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15730	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15727
15731	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	5663959.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15728
15732	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15729
15734	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15731
	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15732
	53-SoCal_Paper (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15733
		2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15734
	•	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15735
	53-SoCal_Paper (MidModerate_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15736
	53-SoCal_Paper (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15737
	53-SoCal_Paper (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15738
-	.	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15739
	53-SoCal_Paper (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15741
	53-SoCal_Paper (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15742
	53-SoCal_Paper (MidModerate_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15743
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15744
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15745
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15746
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15747
		2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15748
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15749
	53-SoCal_Paper (MidModerate_ECGeneral) 53-SoCal Paper (MidModerate ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15751
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15752
	53-SoCal_Paper (MidModerate_ECGeneral)	2035_H2-NG 2036 H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15753 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15754
	53-SoCal_raper (MidModerate_ECGeneral)	2036_H2-NG 2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15754 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15755
		2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15756 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15756
	53-50Cal_raper (MidModerate_ECGeneral)	2036_H2-NG 2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15750 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15757
	53-SoCal_raper (MidModerate_EcGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15758
	53-SoCal_raper (MidModerate_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15759
-		2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15761
	53-SoCal_Paper (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15762
	53-SoCal_Paper (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15763
	- ' ' '	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15764
	•	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15765
	- ' ' '	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15766
	53-SoCal_Paper (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15767
	•	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15768
		2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15769
	53-SoCal_Paper (MidModerate_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15771
	53-SoCal_Paper (MidModerate_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15772
	53-SoCal Paper (MidModerate ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15773
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Tab Contents				
"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P	rep_Industrial" tak	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
Industrial GHG Calc" to produce the results in "4. Calculation	ns".			
In this workbook, the terms "Low", "Mid", and "High" corre	spond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
Equipment ID	Fuel Type	Parameter	Value	Reference
53-SoCal_Paper (MidModerate_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15774
53-SoCal_Paper (MidModerate_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	798951.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15775
53-SoCal_Paper (MidModerate_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15776
53-SoCal_Paper (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15777
	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	5923642.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15778
		O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15779
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15781
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15782
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15783
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15784
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15785
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15786
		* *		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15787
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15788
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15789
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15791
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15792
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15793
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15794
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15795
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15796
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15797 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15798
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15799 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15799
				ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT15801 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT15801
				ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15802
-				ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15803
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15804
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15805
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15806
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15807
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15808
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15809
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15811
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15812
				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15813
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15814
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15815
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15816
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15817
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15818
-				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15819
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_P Industrial GHG Calc" to produce the results in "4. Calculation In this workbook, the terms "Low", "Mid", and "High" corresponds to the corresponds to	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tak Industrial GHG Calc" to produce the results in "4. Calculations". In this workbook, the terms "Low", "Mid", and "High" correspond to the "Cons Equipment ID	TALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the findustrial GHG Calc" to produce the results in "4. Calculations". In this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenario in this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenario in this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenario in this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenario in this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenario in this workbook, the terms "Low "Low "Low "Low "Low "Low "Low "Low	APP1_GHG IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the function in "3.1 EQ Industrial GHG Calc" to produce the results in "4. Calculations".

	A	С	D	E	F
1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
15824	53-SoCal_Paper (MidModerate_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15821
15825	53-SoCal_Paper (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15822
15826	53-SoCal_Paper (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15823
15827	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15824
15828	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	1131862.80	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15825
15829	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15826
15830	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15827
	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15828
	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15829
	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15831
	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15832
-	53-SoCal_Paper (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15833
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15834
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15835
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15836
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15837
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15838
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15839
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15841
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15842
	53-SoCal_Paper (MidModerate_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15843
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15844
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15845
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15846
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15847
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15848
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15849
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15851
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15852
	53-SoCal_Paper (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15853
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT15994
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15995 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15996
	54-SoCal_Paper (MidModerate_ECOvens) 54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15996 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15997
	54-SoCal_Paper (MidModerate_ECOvens)				
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2030_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15998 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT15999
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16001
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16001 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16002
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16003
	54-SoCal_Paper (MidModerate_ECOvens)	2030_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16004
	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG 2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16005
	54-SoCal_Paper (MidModerate_ECOvens)		PRJ % Overall H2 as Blend (scf/100-scf)		
10005	124-200ai_raper (iviidivioderate_ecovells)	2031_H2-NG	rio 10 Overuii 112 us Dieliu (SCJ/ 100-SCJ)	70.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16006

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".		,		
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16010	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16007
16011	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	5542857.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16008
16012	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16009
16014	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16011
16015	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16012
	54-SoCal_Paper (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16013
	2 54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16014
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16015
-	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16016
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16017
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16018
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16019
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16021
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16022
	54-SoCal_Paper (MidModerate_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16023
	754-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16024
	54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16025
	54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16026
	54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16027
	54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16028
	54-SoCal_Paper (MidModerate_ECOvens) 54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16029
	54-SoCal Paper (MidModerate ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16031
	54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16032 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16033
_	7 54-SoCal_Paper (MidModerate_ECOvens)	2033_H2-NG 2034_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16034
	34-30cal_Paper (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16035
	54-SoCal_Paper (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16036
	54-SoCal_Paper (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16037
	54-SoCal Paper (MidModerate ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16038
	2 54-SoCal_Paper (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16039
	54-SoCal Paper (MidModerate ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16041
_	54-SoCal_Paper (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16042
	54-SoCal_Paper (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16043
	7 54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16044
	3 54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16045
	54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16046
	54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16047
	54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16048
	2 54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16049
	54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16051
	54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16052
	54-SoCal_Paper (MidModerate_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16053
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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16057	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16054
16058	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	691645.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16055
16059	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16056
16060	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16057
16061	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	5828721.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16058
16062	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16059
16064	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16061
	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16062
	54-SoCal_Paper (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16063
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16064
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16065
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16066
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16067
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16068
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16069
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16071
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16072
	54-SoCal_Paper (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16073
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16074
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16075
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16076
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16077
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16078
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16079
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16081
	54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16082
	54-SoCal_Paper (MidModerate_ECOvens) 54-SoCal_Paper (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16083 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16084
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16085
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16086 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16086
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16087
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16088
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16089
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16091
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16092
	54-SoCal_Paper (MidModerate_ECOvens)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16093
	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16094
	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16095
	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16096
	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16097
	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16098
	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16099
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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	' .			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16104	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16101
16105	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16102
16106	54-SoCal_Paper (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16103
16107	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16104
16108	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	994158.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16105
16109	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16106
16110	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16107
	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16108
-	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16109
	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16111
	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16112
	54-SoCal_Paper (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16113
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16114
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16115
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16116
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16117
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16118
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16119
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16121
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16122
	54-SoCal_Paper (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16123
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16124
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16125
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16126
-	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16127
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16128
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16129
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16131
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16132
	54-SoCal_Paper (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16133
	54-SoCal_Paper (MidModerate_ECOvens) 54-SoCal Paper (MidModerate ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16134
-	4	2044_H2-NG 2044_H2-NG	PRJ H2 Demana (MMBLU/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16135
	54-SoCal_Paper (MidModerate_ECOvens) 54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16136 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT16137
	54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16137 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16138
	54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16139
	54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16139 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16141
	54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16141 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16142
	54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16142 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16143
	54-SoCal_Paper (MidModerate_ECOvens)	2044_H2-NG 2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16145 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16144
	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG 2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16144 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16145
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10145	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16146

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2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16150	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16147
16151	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	6249147.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16148
16152	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16149
16154	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16151
	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16152
	54-SoCal_Paper (MidModerate_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16153
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16294
		2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16295
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16296
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16297
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16298
		2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16299
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16301
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16302
	55-SoCal_Paper (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16303
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16304
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16305
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16306
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16307
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16308
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16309
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16311
		2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16312
	55-SoCal_Paper (MidModerate_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16313
	55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16314
	55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16315
	55-SoCal_Paper (MidModerate_ICEngines) 55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16316 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16317
	55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16317 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16318
	55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_socalGas.xisx, 1. Data_Prep_industrial, Cell AT16318 ALP1_GHG_Industrow_3_DataPrep_socalGas.xisx, 1. Data_Prep_industrial, Cell AT16319
		2032_H2-NG 2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16321 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16321
	55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16322 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16322
	55-SoCal_Paper (MidModerate_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16323
		2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16324
		2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16325
		2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16326
		2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16327
		2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16328
		2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16329
		2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16331
		2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16332
		2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16333
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16337	7 55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16334
16338	35-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	576101.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16335
16339	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16336
16340	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16337
16341	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	5724327.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16338
16342	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16339
16344	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16341
	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16342
	55-SoCal_Paper (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16343
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16344
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16345
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16346
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16347
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16348
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16349
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16351
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16352
	55-SoCal_Paper (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16353
	755-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16354
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16355
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16356
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16357
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16358
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16359
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16361
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16362
	55-SoCal_Paper (MidModerate_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16363
	7 55-SoCal_Paper (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16364
	55-SoCal_Paper (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16365
	55-SoCal_Paper (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16366
	55-SoCal_Paper (MidModerate_ICEngines) 55-SoCal_Paper (MidModerate_ICEngines)	2037_H2-NG 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16367 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16368
	2 55-SoCal_Paper (MidModerate_ICErigines)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16369 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16369
	55-SoCal_Paper (MidModerate_ICErigines)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16371
	55-SoCal Paper (MidModerate ICEngines)	2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16372
	55-SoCal_Paper (MidModerate_ICErigines)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16373 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16373
	7 55-SoCal_Paper (MidModerate_ICErigines)	2037_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16374
	S 55-SoCal_Paper (MidModerate_ICErigines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16374 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16375
	55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16376
	55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16377 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16377
	55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16378
	2 55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16379
10302	- 199 90-cai_i apei (iviidiviouerate_ietrigilies)	2030_112-110	02 Fertent (36)/ 100-36)/	13.00	ALI I_GITG_ITIGUSTI GW_3_DUCTAT TCP_30CalGas.xisx, I. Data_FTCP_ITIGUSTITAI, CEII AT 103/3

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16384	55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16381
16385	55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16382
16386	55-SoCal_Paper (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16383
16387	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16384
16388	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	850947.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16385
16389	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16386
16390	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16387
	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16388
	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16389
	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16391
_	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16392
	55-SoCal_Paper (MidModerate_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16393
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16394
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16395
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16396
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16397
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16398
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16399
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16401
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16402
	55-SoCal_Paper (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16403
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16404
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16405
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16406
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16407
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16408
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16409
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16411
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16412
	55-SoCal_Paper (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16413
	55-SoCal_Paper (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16415
	55-SoCal_Paper (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16415
	55-SoCal_Paper (MidModerate_ICEngines)	2042_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16416
	55-SoCal_Paper (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16417 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16418
	55-SoCal_Paper (MidModerate_ICEngines) 55-SoCal_Paper (MidModerate_ICEngines)	2042_H2-NG 2042_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (ccf/100 ccf)		
		2042_H2-NG 2042_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16419
	55-SoCal_Paper (MidModerate_ICEngines) 55-SoCal_Paper (MidModerate_ICEngines)	2042_H2-NG 2042_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16421
	55-socal_Paper (MidModerate_ICEngines)	2042_H2-NG 2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16422 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16423
		2042_H2-NG 2043_H2-NG			
	55-SoCal_Paper (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16424
	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ W Overall H2 as Bland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16425
10429	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16426

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1					
2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16430	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16427
16431	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	6152972.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16428
16432	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16429
16434	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16431
16435	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16432
16436	55-SoCal_Paper (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16433
16437	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16434
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16435
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16436
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16437
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16438
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16439
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16441
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16442
	55-SoCal_Paper (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16443
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16444
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16445
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16446
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16447
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16448
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16449
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16451
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16452
	55-SoCal_Paper (MidModerate_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16453
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16594
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16595
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16596
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16597
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16598
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16599
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	NG CUA EF (MT CUA (MARREW)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16601
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16602
	56-SoCal_Paper (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16603
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16604
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ W Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16605
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16606
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16607
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (set/100 set)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16608
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16609
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16611
	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16612
10010	56-SoCal_Paper (MidModerate_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16613

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16617	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16614
16618	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	451638.10	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16615
16619	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16616
16620	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16617
16621	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	5602424.47	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16618
16622	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16619
16624	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16621
	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16622
	56-SoCal_Paper (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16623
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16624
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16625
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16626
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16627
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16628
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16629
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16631
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16632
	56-SoCal_Paper (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16633
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16634
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16635
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16636
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16637
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16638
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16639
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16641
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16642
	56-SoCal_Paper (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16643
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16644
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16645
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16646
	56-SoCal_Paper (MidModerate_ICTurbines) 56-SoCal Paper (MidModerate ICTurbines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16647 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16648
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16649
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16651
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SocalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16652
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16653 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16653
	56-SoCal_Paper (MidModerate_ICTurbines)	2035_H2-NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16654
	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16655
	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG 2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16656 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16656
	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG 2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16657
	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16658
	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16659
10002	120-200ai_raper (iviidivioderate_icrui billes)	2030_02-110	02 Fercent (3CJ/100-3CJ)	15.00	ALF 1_OHO_Huustrow_3_DataFlep_30Caldas.xisx, 1. Data_Flep_Huustrial, Cell A110059

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tak	o. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	.".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16664	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16661
16665	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16662
16666	56-SoCal_Paper (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16663
16667	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16664
16668	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	746324.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16665
16669	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16666
16670	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16667
	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16668
	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16669
	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16671
	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16672
	56-SoCal_Paper (MidModerate_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16673
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16674
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16675
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16676
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16677
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16678
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16679
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16681
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16682
	56-SoCal_Paper (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16683
	56-SoCal_Paper (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16684
	56-SoCal_Paper (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16685
	56-SoCal_Paper (MidModerate_ICTurbines) 56-SoCal Paper (MidModerate ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16686
	56-SoCal Paper (MidModerate ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16687
	56-SoCal_Paper (MidModerate_ICTurbines)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16688 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16689
	56-SoCal_Paper (MidModerate_ICTurbines)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16089 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16691
	56-SoCal_Paper (MidModerate_ICTurbines)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16691 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16692
	56-SoCal_Paper (MidModerate_ICTurbines)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16692 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16693
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16694
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataFrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT16695
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16696
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16697
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16698
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16699
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16701
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16702
	56-SoCal_Paper (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16703
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16704
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16705
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16706
10703	190 00001. Tuper (Imamoderate_letaibilies)	20-11_112 110	The to overall the as bletta (self 100 self)	30.00	7.E. I_S. Gdust. 64_5_50cd. rep_50cd.cds.xi3x, I. Duta_Trep_industrial, 6cil AT10700

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2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspon	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16707
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16708
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16709
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16711
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16712
	56-SoCal_Paper (MidModerate_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16713
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16714
		2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16715
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16716
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16717
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16718
		2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16719
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16721
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16722
	56-SoCal_Paper (MidModerate_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16723
	56-SoCal_Paper (MidModerate_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16724
	56-SoCal_Paper (MidModerate_ICTurbines) 56-SoCal_Paper (MidModerate_ICTurbines)	2043_H2-NG 2043_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16725 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16726
	56-SoCal_Paper (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16727 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16727
		2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16728
	56-SoCal_Paper (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16729
	56-SoCal_Paper (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16731
		2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16732
	56-SoCal_Paper (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16733
	56-SoCal_Paper (MidModerate_ICTurbines)	2044 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT16734
		2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16735
	- · · · · ·	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16736
	<u> </u>	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16737
	56-SoCal_Paper (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16738
		_ 2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16739
		_ 2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16741
		_ 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16742
16746	56-SoCal_Paper (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16743
16747	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16744
16748	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	1260536.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16745
16749	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16746
16750	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16747
16751	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	6249147.82	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16748
16752	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16749
16754	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16751
16755	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16752
16756	56-SoCal_Paper (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16753

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2	Tab Contents	_, ,	·		1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations	,II) .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
16897	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16894
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	319172.88	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16895
16899	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16896
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16897
_	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	5468183.43	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16898
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16899
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16901
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16902
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16903
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16904
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16905
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16906
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16907
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16908
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16909
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16911
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16912
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16913
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16914
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16915
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16916
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16917
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16918
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16919
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16921
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16922
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2032_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16923
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16924
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16925
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16926
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16927
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT16928
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT16929
	57-SoCal_Paper (HighAmbitious_ECGeneral) 57-SoCal Paper (HighAmbitious ECGeneral)	2033_H2-NG	· · · · · · · · · · · · · · · · · · ·		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT16931
		2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16932
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2033_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16933
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16934
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (scf/100 scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16935
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16936
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16937
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16938
10942	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16939

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
16944	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16941
16945	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16942
16946	57-SoCal_Paper (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16943
16947	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16944
16948	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	635245.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16945
16949	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16946
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16947
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16948
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16949
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16951
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16952
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16953
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16954
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16955
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16956
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16957
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16958
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16959
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16961
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16962
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16963
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16964
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16965
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16966
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16967
-	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16968
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16969
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16971
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT16972
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16973
	57-SoCal_Paper (HighAmbitious_ECGeneral) 57-SoCal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16974 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16975
	57-socal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16976
	57-socal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16977 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16977
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16977 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16978
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16978 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16979
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16981
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16981 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16982
	57-socal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16982 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16983
	57-socal_Paper (HighAmbitious_ECGeneral)	2038_H2-NG 2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16985 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16984
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG 2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16985
	57-socal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG 2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16986
10392	121-200ai_rapei (HighAllibitious_Ecgelletal)	2035_HZ-NG	F 10 /0 OVETUII 112 US DIEITU (SCJ/ 100-SCJ)	44.00	ALT 1_GITG_ITIGUSTEGW_3_DataFTEP_30CalGas.xisx, 1. Data_FTEP_ITIGUSTITAI, CEll AT10980

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
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6	Equipment ID	Fuel Type	Parameter	Value	Reference
16990	57-SoCal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16987
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	5977376.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16988
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16989
		2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16991
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16992
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16993
		2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16994
		2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16995
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16996
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16997
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16998
		2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT16999
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17001
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17002
		2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17003
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17004
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17005
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17006
	57-SoCal_Paper (HighAmbitious_ECGeneral) 57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2-NG 2041_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17007
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2-NG 2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17008 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17009
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17009 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17011
		2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17011 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17012
	57-SoCal_raper (HighAmbitious_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17013
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2041_H2 NG 2042 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT17014
	57-SoCal Paper (HighAmbitious ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17015
	4	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17016
	4 - · · · · ·	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17017
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17018
		2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17019
		2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17021
	4	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17022
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17023
		2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17024
		_ 2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17025
	4 - · · · · · ·	_ 2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17026
	4	_ 2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17027
		_ 2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17028
		_ 2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17029
	•	_ 2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17031
	57-SoCal_Paper (HighAmbitious_ECGeneral)	_ 2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17032
	57-SoCal_Paper (HighAmbitious_ECGeneral)	_ 2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17033
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2	Tab Contents	_, ,	·		1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tal	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations	,II) .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17034
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17035
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17036
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17037
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17038
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17039
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17041
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17042
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17043
-	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17044
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17045
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17046
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17047
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17048
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17049
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17051
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17052
	57-SoCal_Paper (HighAmbitious_ECGeneral)	2045_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17053
	58-SoCal_Paper (HighAmbitious_ECOvens) 58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17194 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17195
	58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17196 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17196
	58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17197 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17197
	58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_bataPrep_SocalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17198 ALP1_GHG_IndustPow_3_bataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17198
	58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_bataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17199 ALP1_GHG_Industrow_3_bataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17199
	58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17201
	58-SoCal_Paper (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17202
		2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17203
	58-SoCal_Paper (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17204
	58-SoCal_Paper (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17205
	58-SoCal Paper (HighAmbitious ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17206
	58-SoCal_Paper (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17207
	58-SoCal_Paper (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17208
	58-SoCal_Paper (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17209
	58-SoCal_Paper (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17211
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17212
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17213
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17214
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17215
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17216
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17217
	58-SoCal_Paper (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17218
17222	58-SoCal_Paper (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17219
17222	58-SoCal_Paper (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17219

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1		<u> </u>			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pi	ep_Industrial" tak	o. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17224	58-SoCal_Paper (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17221
17225	58-SoCal_Paper (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17222
17226	58-SoCal_Paper (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17223
17227	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17224
17228	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	514805.51	. ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17225
17229	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17226
	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17227
	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17228
	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17229
	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17231
	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17232
	58-SoCal_Paper (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17233
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17234
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17235
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17236
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17237
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17238
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17239
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17241
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17242
	58-SoCal_Paper (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17243
	58-SoCal_Paper (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17244
	58-SoCal_Paper (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17245
	58-SoCal_Paper (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17246
	58-SoCal_Paper (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17247
	58-SoCal_Paper (High Ambitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		. ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17248
	58-SoCal_Paper (High Ambitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17249 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17251
	58-SoCal_Paper (High Ambitious_ECOvens)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		
	58-SoCal_Paper (HighAmbitious_ECOvens)	2035_H2-NG 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17252 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17253
	58-SoCal_Paper (HighAmbitious_ECOvens) 58-SoCal_Paper (HighAmbitious_ECOvens)	2035_H2-NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17254 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17254
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17254 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17255
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17256 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17256
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17257
		2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1 GHG Industrow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT17258
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17259 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17259
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT17259 ALP1_GHG_IndustPow_3_DataFrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17261
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT17261 ALP1_GHG_IndustPow_3_DataFrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17262
	58-SoCal_Paper (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT17263 ALP1_GHG_IndustPow_3_DataFrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17263
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17264
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17265
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataFrep_SocalGas.xlsx, 1. Data_Frep_Industrial, Cell AT17266 ALP1_GHG_IndustPow_3_DataFrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17266
1/203	100 00001 aper (mgm/mbitious_covens)	2037_112-110	The 70 Overall HZ as Diena (sej) 100-sej)	52.00	7. A. I. 2.110_III.dusti 6w_5_butti 1ep_50caigas.AisA, 1. bata_11ep_III.dusti lai, ceii A117200

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
17270	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17267
17271	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	5877382.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17268
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17269
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17271
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17272
	58-SoCal_Paper (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17273
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17274
		2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17275
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17276
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17277
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17278
		2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17279
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17281
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17282
	58-SoCal_Paper (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17283
	58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17284
	58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17285
	58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17286
	58-SoCal_Paper (HighAmbitious_ECOvens) 58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17287
	58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17288 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17289
	58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17291 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17291
		2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17291 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17292
	58-SoCal_Paper (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17293
	58-SoCal_Paper (HighAmbitious_ECOvens)	2040 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT17294
	58-SoCal Paper (HighAmbitious ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17295
		2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17296
		2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17297
	58-SoCal_Paper (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17298
	58-SoCal Paper (HighAmbitious ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17299
		2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17301
		2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17302
_	58-SoCal_Paper (HighAmbitious_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17303
		2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17304
	•	_ 2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17305
	.	_ 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17306
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17307
		_ 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17308
		_ 2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17309
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17311
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17312
	58-SoCal_Paper (HighAmbitious_ECOvens)	_ 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17313
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17317	7 58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17314
17318	38-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	1064760.11	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17315
17319	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17316
17320	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17317
17321	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	6106848.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17318
17322	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17319
	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17321
	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17322
	58-SoCal_Paper (HighAmbitious_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17323
	7 58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17324
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17325
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17326
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17327
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17328
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17329
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17331
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17332
	58-SoCal_Paper (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17333
	7 58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17334
	58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17335
	58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17336
	58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17337
	58-SoCal_Paper (HighAmbitious_ECOvens) 58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG 2044_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17338
	58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG 2044 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17339 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17341
	58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17341 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17342
	58-SoCal_Paper (HighAmbitious_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17342 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17343
	7 58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17344
	3 58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17345
	58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17346
	58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17347
	S8-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17348
	2 58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17349
	1 58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17351
	58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT17352
	58-SoCal_Paper (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17353
	7 59-SoCal_Paper (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17494
	3 59-SoCal_Paper (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17495
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17496
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17497
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17498
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17499
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17504	59-SoCal_Paper (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17501
17505	59-SoCal_Paper (HighAmbitious_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17502
17506	59-SoCal_Paper (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17503
17507	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17504
17508	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	386799.60	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17505
17509	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17506
17510	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17507
	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17508
	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17509
	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17511
	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17512
	59-SoCal_Paper (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17513
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17514
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17515
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17516
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17517
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17518
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17519
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17521
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17522
	59-SoCal_Paper (HighAmbitious_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17523
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17524
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17525
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17526
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17527
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17528
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17529
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17531
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17532
	59-SoCal_Paper (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17533
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT17534
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (scf/100 scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT17535
	59-SoCal_Paper (HighAmbitious_ICEngines) 59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17536
	59-SoCal Paper (HighAmbitious ICEngines)				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17537
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17538 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17539
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17559 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17541
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17541 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17542
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG 2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17542 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17543
	59-SoCal_Paper (HighAmbitious_ICEngines)	2034_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17545 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17544
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17545
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17545 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17546
1/345	199-200ai_raper (HighAllibitions_Iceligines)	2033_02-110	FID 10 OVETUIL HZ US DIEHU (SCJ/ 100-SCJ)	00.00	ALT 1_GITG_ITIGUSTEOW_3_DataFTEP_30CalGas.xisx, 1. Data_FTEP_ITIGUSTIAI, Cell AT17546

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
17550	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17547
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	5780786.91	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17548
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17549
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17551
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17552
	59-SoCal_Paper (HighAmbitious_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17553
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17554
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17555
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17556
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17557
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17558
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17559
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17561
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17562
	59-SoCal_Paper (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17563
	59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17564
	59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17565
	59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17566
	59-SoCal_Paper (HighAmbitious_ICEngines) 59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17567
	59-SoCal_Paper (HighAmbitious_ICErigines)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17568 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17569
	59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17509 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17571
		2037_H2-NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17572
	59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17573
	59-SoCal_Paper (HighAmbitious_ICEngines)	2037_H2 NG 2038 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17574
	59-SoCal Paper (HighAmbitious ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17575
		2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17576
	59-SoCal_Paper (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17577
	59-SoCal_Paper (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17578
		2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17579
		2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17581
	59-SoCal_Paper (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17582
	59-SoCal_Paper (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17583
		2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17584
		_ 2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17585
		_ 2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17586
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17587
		_ 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17588
		_ 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17589
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17591
	59-SoCal_Paper (HighAmbitious_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17592
	59-SoCal_Paper (HighAmbitious_ICEngines)	_ 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17593
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1		•	•		
2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the fu	ınction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	_		·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	S.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17597	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17594
17598	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	923557.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17595
17599	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17596
17600	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17597
17601	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	6013235.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17598
17602	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17599
17604	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17601
17605	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17602
17606	59-SoCal_Paper (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17603
17607	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17604
	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	994158.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17605
17609	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17606
17610	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17607
17611	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	6052998.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17608
17612	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17609
	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17611
17615	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17612
_	59-SoCal_Paper (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17613
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17614
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17615
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17616
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17617
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17618
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17619
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17621
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17622
	59-SoCal_Paper (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17623
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17624
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17625
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17626
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17627
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17628
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17629
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17631
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17632
	59-SoCal_Paper (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17633
	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17634
	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17635
	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17636
	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17637
	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17638
17642	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17639

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		<u></u>		_	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17644	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17641
17645	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17642
17646	59-SoCal_Paper (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17643
17647	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17644
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	1260536.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17645
17649	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17646
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17647
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17648
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17649
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17651
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17652
	59-SoCal_Paper (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17653
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17794
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17795
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17796
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17797
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17798
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17799
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17801
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17802
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17803
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17804
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17805
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17806
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17807
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17808
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17809
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17811
_	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17812
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17813
	60-SoCal_Paper (HighAmbitious_ICTurbines) 60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17814 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17815
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17816 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17816
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17816 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17817
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17818
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17819
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17819 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17821
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17821 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17822
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17823
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2032_H2-NG 2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17824
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG 2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17825
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG 2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17826
1/025	Too-200ai_raper (HighAlfibitious_ICTuIbilies)	2033_HZ-NU	F 10 /0 OVETUII 112 US DIEITU (SCJ/ 100-SCJ)	08.00	ALF 1_GITG_ITIGUSTFOW_3_DataFTep_30CalGas.xisx, 1. Data_FTep_ITIGUSTFIAI, Cell AT17626

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	<u>-</u>			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17830	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17827
17831	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	5663959.19	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17828
17832	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17829
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17831
17835	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17832
17836	60-SoCal_Paper (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17833
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17834
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17835
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17836
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17837
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17838
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17839
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17841
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17842
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17843
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17844
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17845
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17846
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17847
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17848
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17849
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17851
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17852
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17853
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17854
	60-SoCal_Paper (HighAmbitious_ICTurbines) 60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17855
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17856
	60-SoCal_Paper (HighAmbitious_ICTurbines)				ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17857 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17858
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17858 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17859
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17859 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17861
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17861 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17862
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17863
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2030_H2-NG 2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17864
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2-NG 2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17865
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2-NG 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17866
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2 NG 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17867
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2 NG 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17868
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2 NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17869
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2 NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17803
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2 NG 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17872
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17873
1/0/0	Joo socai_i apei (i iiBii\tiiiniiiinnas_ie i ai biiiles)	2037_112-110	NO NZO ET (IVIT NZO/IVIIVIDU)	0.00	75 1_GITG_IIIGUSTI GW_5_DUGTOI TEP_SOCAIGAS.AISA, 1. Data_FTEP_IIIGUSTIIAI, CEII AT 17875

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17877	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17874
17878	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	798951.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17875
17879	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17876
17880	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17877
17881	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	5923642.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17878
17882	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17879
17884	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17881
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17882
17886	60-SoCal_Paper (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17883
17887	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17884
17888	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	850947.12	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17885
17889	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17886
17890	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17887
17891	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	5977376.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17888
17892	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17889
17894	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17891
17895	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17892
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17893
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17894
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17895
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17896
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17897
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17898
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17899
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17901
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17902
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17903
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17904
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17905
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17906
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17907
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17908
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17909
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17911
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17912
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17913
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17914
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17915
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17916
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17917
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17918
17922	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17919

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
17924	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17921
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17922
-	60-SoCal_Paper (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17923
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17924
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17925
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17926
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17927
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17928
-	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17929
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17931
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17932
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17933
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17934
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17935
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17936
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17937
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17938
	60-SoCal_Paper (HighAmbitious_ICTurbines) 60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG 2044_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17939 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17941
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17941 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17942
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17943
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17944
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17945
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17946
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045 H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17947
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17948
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17949
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17951
	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17952
-	60-SoCal_Paper (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT17953
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18094
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18095
	61-SoCal_Chemicals (LowConservative_ECGeneral)	_ 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18096
	61-SoCal_Chemicals (LowConservative_ECGeneral)	_ 2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18097
	61-SoCal_Chemicals (LowConservative_ECGeneral)	_ 2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18098
	61-SoCal_Chemicals (LowConservative_ECGeneral)	_ 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18099
18104	61-SoCal_Chemicals (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18101
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18102
18106	61-SoCal_Chemicals (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18103
18107	61-SoCal_Chemicals (LowConservative_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18104
18108	61-SoCal_Chemicals (LowConservative_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	150937.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18105
18109	61-SoCal_Chemicals (LowConservative_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18106
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	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_	_Industrial" tab	The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Conse	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
	Equipment ID	Fuel Type	Parameter	Value	Reference
		2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18107
		2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18108
-		2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18109
-		2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18111
-		2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18112
		2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18113
		2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18114
		2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18115
		2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18116
-		2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18117
-		2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18118
-		2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18119
		2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18121
		2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18122
		2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18123
-		2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18124
-		2033_H2-NG 2033_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18125
		2033_H2-NG 2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18126 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18127
		2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18128 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18128
		2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18129
		2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18131
		2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18132
	-	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18133
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2034 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18134
		2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18135
	-	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18136
	_ ,	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18137
		2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18138
		2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18139
-	-	_ 2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18141
	-	_ 2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18142
		_ 2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18143
-		_ 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18144
18148		2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18145
18149	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18146
18150	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18147
18151	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	3209610.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18148
18152	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18149
18154	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18151
18155	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18152
18156	61-SoCal_Chemicals (LowConservative_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18153

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	' .			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18157	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18154
18158	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	252874.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18155
18159	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18156
18160	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18157
18161	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	3314611.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18158
18162	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18159
18164	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18161
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18162
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18163
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18164
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18165
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18166
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18167
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18168
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18169
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18171
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18172
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18173
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18174
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18175
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18176
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18177
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18178
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18179
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18181
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18182
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18183
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18184
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18185
	61-SoCal_Chemicals (LowConservative_ECGeneral) 61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT18186
		2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18187
	61-SoCal_Chemicals (LowConservative_ECGeneral) 61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG 2039_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18188 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18189
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT18191 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT18191
			NG CH4 EF (MT CH4/MMBtu)		
	61-SoCal_Chemicals (LowConservative_ECGeneral) 61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG 2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18192 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18193
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2039_H2-NG 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18193 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18194
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18194 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18195
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG 2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18196 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18197
	61-SoCal_Chemicals (LowConservative_ECGeneral)		BSL NG Consumption (MMBtu/yr)		
		2040_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18198 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT18199
19505	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18199

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1		•	•	•	
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18204	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18201
18205	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18202
18206	61-SoCal_Chemicals (LowConservative_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18203
18207	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18204
18208	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	342856.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18205
18209	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18206
18210	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18207
18211	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	3958968.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18208
18212	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18209
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18211
_	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18212
18216	61-SoCal_Chemicals (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18213
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18214
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	362752.30	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18215
18219	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18216
18220	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18217
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18218
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18219
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18221
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18222
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18223
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18224
_	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18225
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18226
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18227
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18228
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18229
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18231
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18232
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18233
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18234
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18235
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18236
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18237
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18238
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18239
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18241
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18242
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18243
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18244
	61-SoCal_Chemicals (LowConservative_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18245
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1839 2-Socal_Chemicals (LowConservative_ECOvens) 2030_H2-NG Equip. Throughput Fraction (MMBtu/yr) 126071.90 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 1839 62-Socal_Chemicals (LowConservative_ECOvens) 2030_H2-NG 2030_H2-NG 2030_H2-NG 80.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 18400 62-Socal_Chemicals (LowConservative_ECOvens) 2030_H2-NG 02-Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 18400 62-Socal_Chemicals (LowConservative_ECOvens) 2030_H2-NG 02-Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 18400 62-Socal_Chemicals (LowConservative_ECOvens) 2030_H2-NG 02-Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 18400 62-Socal_Chemicals (LowConservative_ECOvens) 2030_H2-NG 02-Percent (scf/100-scf) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 18400 62-Socal_Chemicals (LowConservative_ECOvens) 2031_H2-NG 030_H2-NG NG N20 EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xis, 1. Data 18400 62-Socal_Chemicals (LowConservative_ECOvens) 2031_H2-NG	
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18403 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG PRJ H2 Demand (MMBtu/yr) 150937.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18409 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG Blend % H2 (scf/100-scf) 76.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18411 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG Blend % H2 (scf/100-scf) 16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18412 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG D2 Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18414 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG D2 Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18415 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18415 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18416 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG NG NG P(MT NZO/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18416 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG N	
1840962-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGPRJ % Overall H2 as Blend (scf/100-scf)76.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841062-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGBlend % H2 (scf/100-scf)16.33ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841162-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGBSL NG Consumption (MMBtu/yr)2830582.25ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841262-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGO2 Percent (scf/100-scf)19.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841562-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGNG CO2 EF (MT CO2/MMBtu)0.05ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841662-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGNG CO4 EF (MT CH4/MMBtu)0.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841662-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGNG N2O EF (MT N2O/MMBtu)0.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841762-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGEquip. Throughput Fraction (MMBtu/yr)0.04ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841862-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGPRJ H2 Demand (MMBtu/yr)174219.36ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1842062-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGPRJ N Overall H2 as Blend (scf/100-scf)72.00ALP1_GHG_IndustPo	
18410 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG Blend % H2 (scf/100-scf) 16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18411 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG BSL NG Consumption (MMBtu/yr) 2830582.25 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18412 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG O2 Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18415 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18416 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18416 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG N20 EF (MT N20/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18417 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG Equip. Throughput Fraction (MMBtu/100-MMBtu) 0.24 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18418 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG PRJ H2 Demand (MMBtu/yr) 174219.36 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18420 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG PRJ M Overall H2 as Blend (scf/100-scf) 72.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18420 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG Blend % H2 (scf/100-scf) 16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18421 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG Blend % H2 (scf/100-scf) 16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18421 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG Blend % H2 (scf/100-scf) 16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18421 162-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG Blend % H2 (scf/100-scf) 2032_H2	
18411 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG BSL NG Consumption (MMBtu/yr) 2830582.25 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18412 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG O2 Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18414 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18415 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18416 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG NO	
18412 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG	
1841462-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGNG CO2 EF (MT CO2/MMBtu)0.05ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841562-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGNG CH4 EF (MT CH4/MMBtu)0.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841662-SoCal_Chemicals (LowConservative_ECOvens)2031_H2-NGNG N2O EF (MT N2O/MMBtu)0.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841762-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGEquip. Throughput Fraction (MMBtu/100-MMBtu)0.24ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841862-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGPRJ H2 Demand (MMBtu/yr)174219.36ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1841962-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGPRJ % Overall H2 as Blend (scf/100-scf)72.00ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1842062-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGBlend % H2 (scf/100-scf)16.33ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1842162-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGBSL NG Consumption (MMBtu/yr)2912895.06ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18415 62-SoCal_Chemicals (LowConservative_ECOvens) 2031_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18416 62-SoCal_Chemicals (LowConservative_ECOvens) 18417 62-SoCal_Chemicals (LowConservative_ECOvens) 18418 62-SoCal_Chemicals (LowConservative_ECOvens) 18418 62-SoCal_Chemicals (LowConservative_ECOvens) 18419 62-SoCal_Chemicals (LowConservative_ECOvens) 18419 62-SoCal_Chemicals (LowConservative_ECOvens) 18410 62-SoCal_Chemicals (LowConservative_ECOvens) 18410 62-SoCal_Chemicals (LowConservative_ECOvens) 18410 62-SoCal_Chemicals (LowConservative_ECOvens) 18411 62-SoCal_Chemicals (LowConservative_ECOvens) 18412 62-SoCal_Chemicals (LowConservative_ECOvens) 18413 62-SoCal_Chemicals (LowConservative_ECOvens) 18414 62-SoCal_Chemicals (LowConservative_ECOvens) 18415 62-SoCal_Chemicals (LowConservative_ECOvens) 18416 62-SoCal_Chemicals (LowConservative_ECOvens) 18417 62-SoCal_Chemicals (LowConservative_ECOvens) 18418 62-SoCal_Chemicals (LowConservative_ECOvens) 18419 62-SoCal_Chemicals (LowConservative_ECOvens) 18420 62-SoCal_Chemicals (LowConservative_ECOvens) 18420 62-SoCal_Chemicals (LowConservative_ECOvens) 18421 62-SoCal_Chemicals (LowConservative_ECOvens) 18421 62-SoCal_Chemicals (LowConservative_ECOvens) 18422 62-SoCal_Chemicals (LowConservative_ECOvens) 18423 62-SoCal_Chemicals (LowConservative_ECOvens) 18424 62-SoCal_Chemicals (LowConservative_ECOvens) 18425 62-SoCal_Chemicals (LowConservative_ECOvens) 18426 62-SoCal_Chemicals (LowConservative_ECOvens) 18427 62-SoCal_Chemicals (LowConservative_ECOvens) 18428 62-SoCal_Chemicals (LowConservative_ECOvens) 18429 62-SoCal_Chemicals (LowConservative_ECOvens) 18420 62-SoCal_Chemicals (LowConservative_ECOvens) 18429 62-SoCal_Chemicals (LowConservative_ECOvens) 18430 62-SoCal_Chemicals (LowConservative_ECOvens) 18430 62-SoCal_Chemicals (LowConservative_ECOvens) 18440	
1841762-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGEquip. Throughput Fraction (MMBtu/100-MMBtu)0.24 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 174219.36 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 184191841962-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGPRJ % Overall H2 as Blend (scf/100-scf)72.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 184201842062-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGBlend % H2 (scf/100-scf)16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 184211842162-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGBSL NG Consumption (MMBtu/yr)2912895.06 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data 18421	
1841862-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGPRJ H2 Demand (MMBtu/yr)174219.36ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. DataPrep_SoCalGas.xlsx, 1. DataPrep_	
18419 62-SoCal_Chemicals (LowConservative_ECOvens) 18420 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG	
1842062-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGBlend % H2 (scf/100-scf)16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data1842162-SoCal_Chemicals (LowConservative_ECOvens)2032_H2-NGBlend % H2 (scf/100-scf)2912895.06 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18421 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG BSL NG Consumption (MMBtu/yr) 2912895.06 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18422 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG 02 Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18424 62-SoCal Chemicals (LowConservative_ECOvens) 2032_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18425 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18426 62-SoCal_Chemicals (LowConservative_ECOvens) 2032_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	_ · _
18427 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG Equip. Throughput Fraction (MMBtu/100-MMBtu) 0.24 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18428 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG PRJ H2 Demand (MMBtu/yr) 195981.49 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18429 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG PRJ % Overall H2 as Blend (scf/100-scf) 68.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18430 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG Blend % H2 (scf/100-scf) 16.33 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18431 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG BSL NG Consumption (MMBtu/yr) 3005502.83 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18432 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG 02 Percent (scf/100-scf) 19.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	
18434 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG NG CO2 EF (MT CO2/MMBtu) 0.05 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	a_Prep_Industrial, Cell AT18431
18435 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG NG CH4 EF (MT CH4/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	a_Prep_Industrial, Cell AT18432
18436 62-SoCal_Chemicals (LowConservative_ECOvens) 2033_H2-NG NG N2O EF (MT N2O/MMBtu) 0.00 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data	a_Prep_Industrial, Cell AT18433

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1		<u></u>			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tak	o. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18437	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18434
18438	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	216293.22	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18435
	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18436
18440	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18437
	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	3107485.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18438
	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18439
	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18441
	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18442
	62-SoCal_Chemicals (LowConservative_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18443
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18444
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18445
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18446
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18447
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18448
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18449
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18451
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18452
	62-SoCal_Chemicals (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18453
	62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18454
	62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18455
	62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18456
	62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18457
	62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18458
-	62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18459
	62-SoCal_Chemicals (LowConservative_ECOvens) 62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18461
	-	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18462
	62-SoCal_Chemicals (LowConservative_ECOvens) 62-SoCal_Chemicals (LowConservative_ECOvens)	2036_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18463 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18464
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18465
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18466
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18467 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18467
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18468
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18469
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18471 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18471
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18472
	62-SoCal_Chemicals (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18473
	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18474
	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18475
	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18476
	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18477
	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18478
	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18479
10-102	102 300al_chemicals (LOWCOHSCIVALIVE_LCOVEHS)	2030_112-110	02 Clecint (30)/ 100 30)/	19.00	7.E. 1_5.15_industriom_5_butti 1cp_50cardas.xisx, 1. butta_i 1cp_industrial, Cell A116475

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1		_			
2	Tab Contents				1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	unction in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18484	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18481
18485	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18482
18486	62-SoCal_Chemicals (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18483
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18484
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	298874.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18485
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18486
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18487
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18488
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18489
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18491
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18492
	62-SoCal_Chemicals (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18493
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18494
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18495
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18496
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18497
-	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18498
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18499
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18501
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18502
	62-SoCal_Chemicals (LowConservative_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18503
	62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18504
	62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18505
_	62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18506
	62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18507
	62-SoCal_Chemicals (LowConservative_ECOvens) 62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18508
	_ ,	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18509
	62-SoCal_Chemicals (LowConservative_ECOvens) 62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG	NG CHA FE (MT CHA/MMRtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18511 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT18513
	62-SoCal_Chemicals (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18512 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT18513
	62-SoCal Chemicals (LowConservative_ECOvens)	2041_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18513 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18514
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG 2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18515 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18515
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG 2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18516 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18516
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18517
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18518
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18519
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18519 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18521
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18521 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18522
	62-SoCal_Chemicals (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18523
	62-SoCal_Chemicals (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18524
	62-SoCal_Chemicals (LowConservative_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18525
	62-SoCal Chemicals (LowConservative ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18526 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18526
10323	02 30cai_cricilicais (Lowconscivative_Lcovens)	2073_112-110	1 10 70 Overall 112 as biena (sej) 100-sej)	20.00	7.6. 1_Gilo_ilidasti ow_5_batai rep_socaloas.xisx, 1. bata_riep_ilidastilai, cell Al 16520

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18530	62-SoCal_Chemicals (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18527
18531	62-SoCal_Chemicals (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	4259673.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18528
	62-SoCal_Chemicals (LowConservative_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18529
		2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18531
		2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18532
	62-SoCal_Chemicals (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18533
		2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18534
		2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18535
	-	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18536
	62-SoCal_Chemicals (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18537
	62-SoCal_Chemicals (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18538
		2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18539
	62-SoCal_Chemicals (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18541
	62-SoCal_Chemicals (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18542
		2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18543
		2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18544
	62-SoCal_Chemicals (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18545
	62-SoCal_Chemicals (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18546
	62-SoCal_Chemicals (LowConservative_ECOvens) 62-SoCal_Chemicals (LowConservative_ECOvens)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18547 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18548
	62-SoCal_Chemicals (LowConservative_ECOvens)	2045_H2-NG 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18549
	62-SoCal_Chemicals (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18551
	-	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18551 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18552
	62-SoCal_Chemicals (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18553
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_112 NG 2030 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18694
	63-SoCal Chemicals (LowConservative ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18695
	- · · · · · · · · · · · · · · · · · · ·	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18696
	<u> </u>	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18697
		2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18698
		2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18699
		2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18701
		2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18702
		2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18703
		2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18704
		_ 2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18705
	-	_ 2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18706
	-	_ 2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18707
		_ 2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18708
		_ 2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18709
		_ 2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18711
		_ 2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18712
	-	_ 2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18713
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2	Tab Contents				_
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18717	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18714
18718	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	174219.36	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18715
18719	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18716
18720	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18717
18721	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	2912895.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18718
	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18719
	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18721
	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18722
	63-SoCal_Chemicals (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18723
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18724
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18725
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18726
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18727
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18728
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18729
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18731
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18732
	63-SoCal_Chemicals (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18733
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18734
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18735
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18736
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18737
_	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18738
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18739
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18741
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18742
	63-SoCal_Chemicals (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18743
	63-SoCal_Chemicals (LowConservative_ICEngines) 63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18744 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18745
	63-SoCal Chemicals (LowConservative ICEngines)	2035_H2-NG 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18745 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18746
	63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18740 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18747
	63-SoCal Chemicals (LowConservative ICEngines)	2035_H2-NG 2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18747 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18748
	63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2-NG 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18749 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT18749
	63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18751
	63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18751 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18752
	63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18753
	63-SoCal_Chemicals (LowConservative_ICEngines)	2035_H2 NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18754
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18755
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18756
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18757
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18758
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18759
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18764	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18761
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18762
	63-SoCal_Chemicals (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18763
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18764
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18765
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18766
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18767
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18768
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18769
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18771
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18772
	63-SoCal_Chemicals (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18773
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18774
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18775
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18776
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18777
	63-SoCal_Chemicals (LowConservative_ICEngines) 63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG 2038_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18778 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18779
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18781
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18782
	63-SoCal_Chemicals (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18783
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18784
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18785
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18786
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039 H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18787
	63-SoCal Chemicals (LowConservative ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18788
	63-SoCal Chemicals (LowConservative ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18789
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18791
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18792
	63-SoCal_Chemicals (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18793
	63-SoCal_Chemicals (LowConservative_ICEngines)	_ 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18794
18798	63-SoCal_Chemicals (LowConservative_ICEngines)	_ 2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18795
	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18796
	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18797
1880	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	3814335.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18798
18802	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18799
18804	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18801
18805	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18802
1880	63-SoCal_Chemicals (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18803
18807	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18804
18808	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	342856.14	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18805
18809	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18806

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18810	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18807
1881	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	3958968.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18808
18812	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18809
1881	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18811
1881	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18812
	63-SoCal_Chemicals (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18813
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18814
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18815
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18816
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18817
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18818
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18819
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18821
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18822
	63-SoCal_Chemicals (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18823
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18824
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18825
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18826
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18827
1883	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18828
1883	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18829
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18831
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18832
	63-SoCal_Chemicals (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18833
	7 63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18834
	63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18835
	63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18836
	63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMPtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18837
	63-SoCal_Chemicals (LowConservative_ICEngines) 63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18838 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18839
	63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18841
	63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18842
	63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18843
	7 63-SoCal_Chemicals (LowConservative_ICEngines)	2044_H2-NG 2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18844 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18844
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18845
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18846
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18847
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18848
	2 63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18849
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18851
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18852
	63-SoCal_Chemicals (LowConservative_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18853
1000	700 000al_chemicals (Lowconservative_letrigines)	2073_112 110	NO NZO EI (IVII NZO) WIIVIDEU)	0.00	7.E. 1_G.1.G_industriow_5_buttaricp_socials.xisx, 1. butta_ircp_industrial, cell Al 10055

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tal			
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
18997	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18994
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	126071.90	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18995
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18996
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18997
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	2754753.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18998
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT18999
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19001
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19002
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19003
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19004
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19005
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19006
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19007
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19008
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19009
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19011
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19012
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19013
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19014
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19015
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19016
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19017
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19018
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19019
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19021
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19022
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19023
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19024
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19025
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19026
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19027
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19028
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19029 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19031
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG			
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19032
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2033_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19033
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19034
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19035
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19036
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19037
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19038
19042	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19039

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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"			•	
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenar	OS.	
5	, , , , , ,		·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19044	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19041
19045	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19042
19046	64-SoCal_Chemicals (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19043
19047	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19044
19048	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	235230.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19045
19049	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19046
19050	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19047
19051	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	3209610.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19048
19052	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19049
19054	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19051
19055	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19052
19056	64-SoCal_Chemicals (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19053
19057	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19054
19058	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	252874.62	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19055
19059	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19056
19060	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19057
19061	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	3314611.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19058
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19059
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19061
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19062
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19063
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19064
_	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19065
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19066
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19067
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19068
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19069
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19071
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19072
-	64-SoCal_Chemicals (LowConservative_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19073
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19074
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19075
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19076
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19077
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19078
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19079
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19081
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19082
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19083
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19084
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19085
19089	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19086

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					-
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19090	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19087
19091	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	3678542.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19088
19092	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19089
19094	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19091
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19092
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19093
_	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19094
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19095
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19096
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19097
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19098
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19099
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19101
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19102
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19103
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19104
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19105
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19106
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19107
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19108
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19109
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19111
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19112 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19113
	64-SoCal_Chemicals (LowConservative_ICTurbines) 64-SoCal_Chemicals (LowConservative_ICTurbines)	2041_H2-NG 2042 H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19113 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19114
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19114 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19115
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG 2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19116
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG 2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19117
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19118
	64-SoCal Chemicals (LowConservative ICTurbines)	2042_H2-NG 2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19119
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG 2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19119 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19121
<u> </u>	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19122
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19123
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19124
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19125
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19126
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19127
_	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19128
_	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19129
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19131
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19132
	64-SoCal Chemicals (LowConservative ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19133
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tak	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19137	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19134
19138	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	398839.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19135
19139	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19136
19140	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19137
19141	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	4414866.39	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19138
19142	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19139
19144	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19141
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19142
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19143
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19144
19148	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	415203.98	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19145
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19146
19150	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19147
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19148
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19149
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19151
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19152
	64-SoCal_Chemicals (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19153
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19294
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19295
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19296
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19297
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19298
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19299
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19301
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19302
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19303
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19304
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19305
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19306
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19307
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19308
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19309
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19311
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19312
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19313
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19314
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19315
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19316
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19317
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19318
19322	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19319

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19324	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19321
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19322
19326	65-SoCal_Chemicals (MidModerate_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19323
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19324
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19325
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19326
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19327
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19328
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19329
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19331
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19332
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19333
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19334
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19335
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19336
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19337
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19338
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19339
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19341
	65-SoCal_Chemicals (MidModerate_ECGeneral) 65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19342
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2034_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19343
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG 2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19344 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19345
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19346 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19346
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1 GHG Industrow_3_bataPrep_SocalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19340 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19347
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG 2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19348
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19349
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19351
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19352
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19353
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19354
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19355
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19356
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19357
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19358
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19359
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19361
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19362
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19363
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19364
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19365
	65-SoCal Chemicals (MidModerate ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19366
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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19370	65-SoCal_Chemicals (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19367
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	3431401.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19368
19372	65-SoCal_Chemicals (MidModerate_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19369
		2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19371
<u> </u>	_	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19372
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19373
		2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19374
	_	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19375
		2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19376
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19377
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19378
		2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19379
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19381
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19382
		2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19383
		2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19384
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19385
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19386
		2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19387
		2039_H2-NG 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19388 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19389
	-	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19369 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19391
		2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19392
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19393
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2040 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19394
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19395
	<u> </u>	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19396
	-	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19397
		2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19398
	-	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19399
		2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19401
	- · · · · · · · · · · · · · · · · · · ·	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19402
		2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19403
		2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19404
		_ 2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19405
	-	_ 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19406
	- - · · · · · · · · · · · · · · · · · ·	_ 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19407
	-	_ 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19408
		_ 2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19409
		_ 2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19411
		_ 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19412
	65-SoCal_Chemicals (MidModerate_ECGeneral)	_ 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19413
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19417	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19414
19418	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	657082.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19415
19419	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19416
19420	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19417
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	4106596.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19418
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19419
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19421
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19422
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19423
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19424
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19425
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19426
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19427
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19428
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19429
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19431
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19432
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19433
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19434
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19435
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19436
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19437
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19438
	65-SoCal_Chemicals (MidModerate_ECGeneral) 65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19439
		2044_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19441
	65-SoCal_Chemicals (MidModerate_ECGeneral) 65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT19442
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2044_H2-NG 2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19443 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19444
	65-SoCal Chemicals (MidModerate ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19445
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19445 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19446
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19447 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19447
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19447 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19448
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19449
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19451
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19452
	65-SoCal_Chemicals (MidModerate_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19453
	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19594
	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19595
	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19596
	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19597
	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19598
	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19599
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	' .			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19604	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19601
19605	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19602
19606	66-SoCal_Chemicals (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19603
19607	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19604
19608	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	177530.74	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19605
19609	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19606
19610	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19607
	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19608
	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19609
	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19611
	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19612
	66-SoCal_Chemicals (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19613
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19614
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19615
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19616
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19617
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19618
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19619
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19621
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19622
	66-SoCal_Chemicals (MidModerate_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19623
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19624
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19625
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19626
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19627
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19628
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19629
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19631
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19632
	66-SoCal_Chemicals (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19633
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19634
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19635
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19636
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19637
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19638
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19639
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19641
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19642
	66-SoCal_Chemicals (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19643
	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19644
	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19645
19649	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19646

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19650	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19647
19651	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	3209610.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19648
19652	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19649
19654	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19651
19655	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19652
19656	66-SoCal_Chemicals (MidModerate_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19653
19657	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19654
19658	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	357402.22	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19655
19659	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19656
19660	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19657
19661	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	3314611.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19658
19662	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19659
19664	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19661
19665	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19662
19666	66-SoCal_Chemicals (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19663
19667	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19664
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	396305.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19665
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19666
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19667
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19668
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19669
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19671
_	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19672
	66-SoCal_Chemicals (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19673
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19674
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19675
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19676
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19677
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19678
_	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19679
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19681
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19682
	66-SoCal_Chemicals (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19683
	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19684
	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19685
	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19686
	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19687
	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19688
19692	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19689
19694	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19691
	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19692
19696	66-SoCal_Chemicals (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19693

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarion	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19697	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19694
19698	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	535172.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19695
19699	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19696
19700	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19697
19701	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	3814335.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19698
19702	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19699
19704	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19701
	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19702
	66-SoCal_Chemicals (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19703
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19704
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19705
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19706
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19707
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19708
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19709
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19711
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19712
	66-SoCal_Chemicals (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19713
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19714
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19715
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19716
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19717
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19718
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19719
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19721
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19722
	66-SoCal_Chemicals (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19723
	66-SoCal_Chemicals (MidModerate_ECOvens) 66-SoCal Chemicals (MidModerate ECOvens)	2043_H2-NG 2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19724
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG 2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19725 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19726
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19727 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19727
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19728 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19728
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT19729 ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT19729
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19731
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19732
	66-SoCal_Chemicals (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19733
	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19734
	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19735
	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19736
	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19737
	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19738
	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19739
13742	oo socal_chemicals (iviidiviouciate_ecovens)	20 11 112-110	02 Tereent (36)/100 36)/	19.00	ALI 1_0110_111003t1 0W_3_batta11cp_30ca10a3.xi3x, 1. batta_r1ep_i11uast11ai, Cell A113733

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
19744	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19741
19745	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19742
19746	66-SoCal_Chemicals (MidModerate_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19743
19747	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19744
19748	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	848263.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19745
-	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19746
19750	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19747
	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19748
	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19749
	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19751
	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19752
	66-SoCal_Chemicals (MidModerate_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19753
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19894
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19895
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19896
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19897
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19898
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19899
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19901
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19902
	67-SoCal_Chemicals (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19903
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19904
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19905
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19906
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19907
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19908
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19909
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19911
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19912
	67-SoCal_Chemicals (MidModerate_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19913 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19914
	67-SoCal_Chemicals (MidModerate_ICEngines) 67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19914 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19915
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19915 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19916
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19916 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19917
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SocalGas.xisx, 1. Data_Prep_Industrial, Cell AT19917 ALP1 GHG IndustPow 3 DataPrep SoCalGas.xisx, 1. Data_Prep_Industrial, Cell AT19918
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19918 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19919
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19919 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19921
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19921 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19922
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19923
	67-SoCal_Chemicals (MidModerate_ICEngines)	2032_H2-NG 2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19924
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG 2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19925
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19926 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19926
13375	Tov-2004 Chemicals (Minnionerate_ICENgines)	2033_02-110	FIG /0 OVERUIL 112 US DIETIU (SCJ/ 100-SCJ)	08.00	ALF 1_OHO_HIUUSIFOW_3_DataFlep_30Caldas.xisx, 1. Data_Flep_Hiuusifiai, Cell A119920

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19927
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19928
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19929
		2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19931
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19932
	67-SoCal_Chemicals (MidModerate_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19933
		2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19934
		2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19935
		2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19936
	67-SoCal_Chemicals (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19937
	67-SoCal_Chemicals (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19938
		2034_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19939
	67-SoCal_Chemicals (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19941
	67-SoCal_Chemicals (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19942
		2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19943
	67-SoCal_Chemicals (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19944
	67-SoCal_Chemicals (MidModerate_ICEngines) 67-SoCal_Chemicals (MidModerate_ICEngines)	2035_H2-NG 2035_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19945 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19946
	-	2035_H2-NG 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19947
		2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19948
	67-SoCal_Chemicals (MidModerate_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19949
	67-SoCal_Chemicals (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19951
		2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19952
	67-SoCal_Chemicals (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19953
	67-SoCal Chemicals (MidModerate ICEngines)	2036 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19954
	67-SoCal_Chemicals (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19955
		_ 2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19956
		2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19957
		_ 2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19958
		_ 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19959
		_ 2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19961
1996		2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19962
1996		2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19963
1996	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19964
1996	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	396305.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19965
1996	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19966
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19967
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	3431401.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19968
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19969
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19971
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19972
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19973

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter Parame	Value	Reference
1997	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19974
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19975
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19976
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19977
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19978
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19979
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19981
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19982
	67-SoCal_Chemicals (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19983
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19984
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19985
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19986
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19987
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19988
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19989
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19991
	67-SoCal_Chemicals (MidModerate_ICEngines) 67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG 2039_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19992 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19993
	67-SoCal_Chemicals (MidModerate_ICEngines)	2039_H2-NG 2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19994 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19994
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19995
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19996
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19997
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19998
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT19999
	67-SoCal Chemicals (MidModerate ICEngines)	2040 H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT20001
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20002
	67-SoCal_Chemicals (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20003
	67-SoCal_Chemicals (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20004
	67-SoCal_Chemicals (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20005
	67-SoCal_Chemicals (MidModerate_ICEngines)	_ 2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20006
	67-SoCal_Chemicals (MidModerate_ICEngines)	_ 2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20007
	67-SoCal_Chemicals (MidModerate_ICEngines)	_ 2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20008
	67-SoCal_Chemicals (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20009
2001	67-SoCal_Chemicals (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20011
2001	67-SoCal_Chemicals (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20012
2001	67-SoCal_Chemicals (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20013
2001	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20014
20018	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	657082.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20015
20019	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20016
20020	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20017
2002	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	4106596.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20018
20022	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20019

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep_Industrial" tak	o. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corres	oond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20024	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20021
20025	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20022
20026	67-SoCal_Chemicals (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20023
20027	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20024
20028	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	720361.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20025
20029	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20026
20030	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20027
	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20028
	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20029
	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20031
	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20032
	67-SoCal_Chemicals (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20033
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20034
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20035
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20036
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20037
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20038
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20039
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20041
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20042
	67-SoCal_Chemicals (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20043
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20044
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20045
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20046
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20047
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20048
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20049
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG	NG COLA FF (MT COLA (MANAPELL)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20051
	67-SoCal_Chemicals (MidModerate_ICEngines)	2045_H2-NG 2045_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20052 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20053
_	67-SoCal_Chemicals (MidModerate_ICEngines)				
	68-SoCal_Chemicals (MidModerate_ICTurbines) 68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20194 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20195
	-	2030_H2-NG			
	68-SoCal_Chemicals (MidModerate_ICTurbines) 68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20196 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20197
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20198
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_socalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20198 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20199
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20199 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20201
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20201 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20202
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20203
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20204
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20204 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20205
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20206
20209	100-30Cai_Crieffiicais (iviidivioderate_iCrurbiffes)	Z031_UZ-ING	FIN 10 OVERUIL HZ US DIEHU (SCJ/ 100-SCJ)	70.00	ALTI_OHO_HUUSTTOW_3_DataFTEP_30CalGas.xisx, 1. Data_FTEP_HUUSTHal, Cell A120200

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1		_			
2	Tab Contents	<u> </u>			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20210	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20207
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	2830582.25	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20208
20212	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20209
		2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20211
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20212
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20213
	_	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20214
	_	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20215
		2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20216
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20217
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20218
		2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20219
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20221
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20222
		2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20223
		2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20224
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20225
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20226
	_	2033_H2-NG 2033_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20227
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2033_H2-NG 2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20228 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20229
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2033_H2-NG 2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SocalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20229 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20231
		2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20231 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20232
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2033_H2-NG 2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20233
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2033_112 NG 2034 H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20234
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20235
	-	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20236
	-	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20237
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20238
	-	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20239
		2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20241
	_	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20242
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20243
		2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20244
		_ 2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20245
	68-SoCal_Chemicals (MidModerate_ICTurbines)	_ 2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20246
	68-SoCal_Chemicals (MidModerate_ICTurbines)	_ 2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20247
	68-SoCal_Chemicals (MidModerate_ICTurbines)	_ 2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20248
	-	_ 2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20249
	68-SoCal_Chemicals (MidModerate_ICTurbines)	_ 2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20251
	68-SoCal_Chemicals (MidModerate_ICTurbines)	_ 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20252
	68-SoCal_Chemicals (MidModerate_ICTurbines)	_ 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20253
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5	-				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20257	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20254
20258	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	357402.22	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20255
20259	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20256
20260	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20257
20261	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	3314611.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20258
20262	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20259
20264	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20261
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20262
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20263
20267	68-SoCal_Chemicals (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20264
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	396305.03	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20265
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20266
		2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20267
		2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20268
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20269
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20271
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20272
		2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20273
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20274
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20275
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20276
		2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20277
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20278
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20279
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20281
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20282
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20283
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20284
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20285
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20286
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20287
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20288
		2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20289
		2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20291
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20292
	68-SoCal_Chemicals (MidModerate_ICTurbines) 68-SoCal_Chemicals (MidModerate_ICTurbines)	2039_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20293
		2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20294
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Rlend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20295
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20296
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20297
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20298
20302	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20299

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspon	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20304	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20301
20305	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20302
20306	68-SoCal_Chemicals (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20303
20307	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20304
20308	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	595481.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20305
20309	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20306
20310	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20307
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20308
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20309
		2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20311
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20312
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20313
		2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20314
		2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20315
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20316
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20317
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20318
		2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20319
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20321
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20322
		2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20323
		2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20324
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20325
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20326
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20327
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20328
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20329
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20331
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20332
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20333
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20334
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20335
		2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20336
	-	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20337
20342	68-SoCal_Chemicals (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20338
20342	68-SoCal_Chemicals (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20339
	-	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20341
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20342
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20343
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20344
	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20345
20349	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20346

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20350	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20347
20351	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	4561561.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20348
20352	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20349
20354	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20351
20355	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20352
20356	68-SoCal_Chemicals (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20353
20497	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20494
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	143716.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20495
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20496
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20497
_	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20498
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20499
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20501
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20502
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20503
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20504
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20505
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20506
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20507
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20508
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20509
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20511
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20512
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20513
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20514
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20515
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20516
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20517
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20518
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20519
	69-SoCal_Chemicals (HighAmbitious_ECGeneral) 69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG 2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20521 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20522
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2032_H2-NG 2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20523 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20524
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20525
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20525 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20526
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20520 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20527
—	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20527 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20528
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20528 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20529
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20329 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20531
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2033_H2-NG 2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20531 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20532
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)		NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20532 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20533
20330	loa-aocai_chennicais (HighAnnoitions_Ecgenerai)	2033_H2-NG	INO INZO LE (IVIT INZO/IVIIVIDLU)	0.00	ALT 1_GITG_ITIGUSTFOW_3_DataFTEP_30CatGas.xisX, 1. Data_FTEP_ITIGUSTTAI, Cell AT20555

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20537	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20534
20538	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	283430.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20535
20539	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20536
20540	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20537
20541	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	3107485.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20538
20542	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20539
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20541
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20542
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20543
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20544
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20545
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20546
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20547
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20548
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20549
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20551
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20552
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20553
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20554
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20555
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20556
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20557
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20558
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20559
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	NG CHA EF (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20561
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20562
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20563
	69-SoCal_Chemicals (HighAmbitious_ECGeneral) 69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20564 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20565
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20566 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20566
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20567 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20567
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20568
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20569
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20509 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20571
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20572
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20572 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20573
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2037_H2-NG 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20574
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20575
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20576
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20577
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20578
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20579
20302	100 00001_Chemicalo (riighAmbitious_Ecocheral)	2030_112-110	02 i cicciit (30)/ 100 30)/	5.00	7.E. 1_5.16_industriow_5_butti 1cp_50cardus.xisx, 1. butta_i 1cp_industrial, Cell A1205/5

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2	Tab Contents				_
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20584	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20581
20585	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20582
20586	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20583
20587	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20584
20588	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	476942.95	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20585
20589	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20586
_	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20587
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20588
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20589
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20591
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20592
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20593
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20594
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20595
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20596
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20597
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		2 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20598
_	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20599
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20601
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20602
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20603
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20604
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20605
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20606
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20607
	69-SoCal_Chemicals (HighAmbitious_ECGeneral) 69-SoCal Chemicals (HighAmbitious ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20608
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG 2041_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		O ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20609 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20611
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG 2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20611 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20612
_	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell A120612 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20613
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2041_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20613 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20614
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG 2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20614 5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20615
_	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20013 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20616
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		3 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20010
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		L ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20618
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20019
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		5 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20621
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20622
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20623
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20624
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		5 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20625
	69-SoCal Chemicals (HighAmbitious ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20025 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20626
20029	103 30cal_chemicals (HighAmbitious_LeGeneral)	2073_112-110	1 10 70 Overall 112 as Diena (scj/ 100-scj/	20.00	ALI I_GITO_ITIQUSTI OW_5_DUTATI TEP_30CatOas.AlsA, I. Data_FTEP_ITIQUSTITAL, CEILAT20020

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20630	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20627
20631	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	4259673.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20628
20632	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20629
20634	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20631
20635	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20632
20636	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20633
20637	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20634
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20635
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20636
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20637
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	4414866.39	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20638
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20639
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20641
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20642
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20643
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20644
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20645
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20646
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20647
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20648
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20649
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20651
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20652
	69-SoCal_Chemicals (HighAmbitious_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20653
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20794
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20795
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20796
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20797
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20798
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20799
20804	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20801
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20802
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20803
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20804
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20805
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20806
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20807
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20808
20812	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20809
20814	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20811
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20812
20816	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20813

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pr	ep Industrial" tak	. The input data in this tab was processed through the fu	nction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculation				
4	In this workbook, the terms "Low", "Mid", and "High" corres	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenarios	5.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20817	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20814
20818	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	211837.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20815
20819	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20816
20820	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20817
20821	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	2912895.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20818
20822	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20819
20824	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20821
20825	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20822
20826	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20823
20827	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20824
20828	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	247088.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20825
20829	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20826
20830	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20827
20831	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	3005502.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20828
20832	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20829
20834	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20831
20835	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20832
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20833
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20834
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20835
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20836
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20837
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20838
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20839
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20841
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20842
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20843
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20844
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20845
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20846
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20847
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20848
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20849
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20851
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20852
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20853
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20854
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20855
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20856
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20857
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20858
20862	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20859

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20861
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20862
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20863
		2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20864
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20865
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20866
		2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20867
		2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20868
20872	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20869
20874	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20871
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20872
		2037_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20873
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20874
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20875
-		2038_H2-NG 2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20876
	70-socal_chemicals (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20877 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20878
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20879
20884	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20875
		2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20882
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20883
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20884
		2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20885
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20886
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2039 H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20887
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	_ 2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20888
		_ 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20889
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	_ 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20891
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20892
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20893
20897		2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20894
20898	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	535172.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20895
20899	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20896
20900	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20897
		2040_H2-NG	BSL NG Consumption (MMBtu/yr)	3814335.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20898
20902	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20899
20904	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20901
		2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20902
		2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20903
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20904
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20905
20909	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20906

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	".			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenario	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
20910	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20907
20911	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	3958968.58	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20908
20912	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20909
20914	1 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20911
20915	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20912
20916	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20913
20917	7 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20914
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20915
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20916
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20917
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20918
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20919
	1 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20921
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20922
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20923
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20924
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20925
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20926
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20927
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20928
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20929
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20931
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20932
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20933
-	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20934
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20035
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20936
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20037
2094	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT20938
20942	70-SoCal_Chemicals (HighAmbitious_ECOvens) 70-SoCal Chemicals (HighAmbitious ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20939
20944	70-socal_chemicals (HighAmbitious_ECOvens) 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG 2044_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20941 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20942
	70-socal_chemicals (HighAmbitious_ECOvens)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20942 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20943
	7 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2044_H2-NG 2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20944 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20944
	70-socal_chemicals (HighAmbitious_ECOvens)	2045_H2-NG 2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1 GHG Industrow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT20945
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG 2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20946
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20947
	1 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20948
20952	2 70-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20949
	170-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20949 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20951
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20951 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20952
	70-SoCal_Chemicals (HighAmbitious_ECOvens)	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20953 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT20953
2093	pro-socal_chemicals (mgnAmbitious_ccovens)	2043_FIZ-NG	INO INZO EF (INIT INZO/INIINIDEU)	0.00	ALT 1_OHO_HIUUSTFOW_3_DataFlep_30Caldas.xisx, 1. Data_Flep_Hiuustfial, Cell A120953

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5		<u></u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21097	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21094
21098	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	143716.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21095
21099	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21096
21100	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21097
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21098
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21099
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21101
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21102
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21103
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21104
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21105
-	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21106
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21107
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21108
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21109
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21111
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21112
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21113
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21114
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21115
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21116
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21117
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21118
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21119
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21121 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21122
	71-SoCal_Chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2032_H2-NG 2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		
	71-Socal_chemicals (HighAmbitious_ICEngines)	2032_H2-NG 2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21123 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21124
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG 2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21125
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21126 ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21126
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21127
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21128
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21129
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21131
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21132
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21133
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21134
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21135
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21136
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21137
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21138
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21139
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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21144	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21141
21145	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21142
21146	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21143
21147	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21144
21148	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	320123.32	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21145
-	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21146
21150	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21147
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21148
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21149
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21151
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21152
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21153
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21154
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21155
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21156
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21157
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21158
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21159
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21161
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21162
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21163
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21164
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21165
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21166
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21167
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21168
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21169
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21171
	71-SoCal_Chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21172
	71-SoCal_Chemicals (HighAmbitious_ICEngines) 71-SoCal Chemicals (HighAmbitious ICEngines)	2037_H2-NG 2038_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21173 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21174
	71-socal_chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21174 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21175
	71-30Cal_Chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21175 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21176
	71-50Cal_Chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21177 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21177
	71-SoCal Chemicals (HighAmbitious ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT21178
	71-socal_chemicals (HighAmbitious_ICEngines) 71-soCal_chemicals (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21178 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21179
	71-50Cal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21179 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21181
	71-50Cal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21181 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21182
	71-50Cal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21183
	71-50Cal_Chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21184
	71-50Cal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21185
	71-50Cal_Chemicals (HighAmbitious_ICEngines) 71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21186 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21186
21105	1/1-30Cal_Chefficals (trightenibilions_icensines)	2035_HZ-NU	F 10 /0 OVETUII 112 US DIEITU (SCJ/ 100-SCJ)	44.00	ALF 1_GITG_ITIGUSTEDW_3_DataFTEP_30CalGas.xisx, 1. Data_FTEP_ITIGUSTITAI, CEII ATZ1180

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1		•	•	•					
2	Tab Contents]							
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the fu	nction in "3.1 EQ					
3	Industrial GHG Calc" to produce the results in "4. Calculations".								
4	In this workbook, the terms "Low", "Mid", and "High" correspo								
5			· · · · · · · · · · · · · · · · · · ·						
6	Equipment ID	Fuel Type	Parameter	Value	Reference				
21190	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21187				
21191	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	3678542.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21188				
21192	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21189				
21194	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21191				
21195	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21192				
21196	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21193				
21197	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21194				
21198	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	535172.66	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21195				
21199	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21196				
21200	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21197				
21201	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	3814335.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21198				
21202	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21199				
21204	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21201				
21205	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21202				
21206	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21203				
21207	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21204				
21208	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	595481.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21205				
21209	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21206				
		2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21207				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21208				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21209				
		2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21211				
		2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21212				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21213				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21214				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21215				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21216				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21217				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21218				
		2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21219				
		2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21221				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21222				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21223				
		2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21224				
		2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21225				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21226				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21227				
		2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21228				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21229				
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21231				
		2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21232				
21236	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21233				

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21237	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21234
21238	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	784764.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21235
21239	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21236
21240	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21237
21241	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	4414866.39	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21238
21242	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21239
21244	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21241
21245	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21242
21246	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21243
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21244
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	848263.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21245
21249	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21246
21250	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21247
21251	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	4561561.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21248
21252	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21249
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21251
21255	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21252
	71-SoCal_Chemicals (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21253
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21394
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21395
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21396
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21397
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21398
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21399
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21401
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21402
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21403
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21404
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21405
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21406
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21407
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21408
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21409
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21411
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21412
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21413
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21414
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21415
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21416
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21417
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21418
21422	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21419

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o_Industrial" tab	function in "3.1 EQ		
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21424	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21421
21425	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21422
21426	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21423
21427	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21424
21428	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	247088.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21425
21429	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21426
21430	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21427
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21428
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21429
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21431
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21432
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21433
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21434
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21435
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21436
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21437
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21438
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21439
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21441
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21442
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21443
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21444
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21445
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21446
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21447
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21448
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21449
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21451
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21452
	72-SoCal_Chemicals (HighAmbitious_ICTurbines) 72-SoCal Chemicals (HighAmbitious ICTurbines)	2035_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21453
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21454 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21455
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21455 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21456
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21456 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21457
	72-SoCal Chemicals (HighAmbitious ICTurbines)	2036_H2-NG 2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21457 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21458
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21458 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21459
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21459 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21461
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21461 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21462
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21463
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2030_H2-NG 2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21464
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21465
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG 2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21466
21403	1/2 30cal_chemicals (mgn/mbitious_letarbines)	2037_112-1NG	1 113 70 Overall 112 as biella (sej/ 100-sej/	52.00	ALI 1_0110_111003ti 0w_0_batta 1CP_00CalGas.xisx, 1. Data_r1CP_111003ti lai, Cell A121400

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21470	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21467
21471	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	3431401.02	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21468
21472	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21469
21474	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21471
21475	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21472
21476	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21473
21477	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21474
21478	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	435966.53	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21475
21479	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21476
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21477
21481	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	3551285.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21478
21482	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21479
21484	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21481
21485	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21482
21486	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21483
21487	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21484
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21485
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21486
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21487
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21488
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21489
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21491
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21492
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21493
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21494
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21495
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21496
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21497
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21498
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21499
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21501
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21502
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21503
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21504
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21505
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21506
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21507
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21508
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21509
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21511
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21512
21516	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21513

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre				
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21517	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21514
21518	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	657082.26	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21515
21519	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21516
21520	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21517
21521	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	4106596.01	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21518
21522	² 72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21519
21524	172-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21521
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21522
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21523
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21524
21528	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	720361.96	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21525
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21526
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21527
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21528
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21529
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21531
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21532
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21533
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21534
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21535
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21536
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21537
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21538
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21539
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21541
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21542
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21543
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21544
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21545
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21546
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21547
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21548
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21549
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21551
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21552
	72-SoCal_Chemicals (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21553
	773-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21694
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21695
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21696
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21697
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21698
21/02	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21699

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1		_						
2	Tab Contents							
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Industrial" tab. The input data in this tab was processed through the function in "3.1 EQ							
3	Industrial GHG Calc" to produce the results in "4. Calculations".							
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.				
5								
6	Equipment ID	Fuel Type	Parameter	Value	Reference			
21704	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21701			
21705	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21702			
21706	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21703			
21707	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21704			
21708	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	53711.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21705			
21709	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21706			
21710	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21707			
21711	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21708			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21709			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21711			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21712			
21716	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21713			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21714			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21715			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21716			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21717			
_	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21718			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21719			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21721			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21722			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21723			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21724			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21725			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21726			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21727			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21728			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21729			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21731			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21732			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21733			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21734			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21735			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21736			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21737			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21738			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21739			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21741			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21742			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21743			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21744			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21745			
21/49	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21746			

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21750	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21747
21751	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	1066740.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21748
21752	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21749
21754	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21751
21755	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21752
21756	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21753
21757	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21754
21758	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	87518.93	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21755
21759	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21756
21760	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21757
21761	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	1075027.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21758
21762	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21759
21764	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21761
21765	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21762
21766	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21763
21767	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21764
21768	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	92784.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21765
21769	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21766
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21767
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	1086078.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21768
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21769
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21771
<u> </u>	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21772
<u> </u>	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21773
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21774
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21775
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21776
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21777
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21778
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21779
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21781
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21782
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21783
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21784
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21785
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21786
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21787
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21788
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21789
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21791
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21792
21796	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21793

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
21797	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21794
21798	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	109056.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21795
21799	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21796
21800	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21797
21801	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	1121321.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21798
21802	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21799
21804	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21801
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21802
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21803
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21804
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	115515.68	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21805
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21806
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21807
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21808
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21809
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21811
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21812
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21813
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21814
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21815
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21816
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21817
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21818
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21819
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21821
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21822
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21823
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21824
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21825
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21826
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21827
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral) 73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21828
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG 2043_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21829 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21831
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG 2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21831 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21832
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG 2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21832 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21833
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2043_H2-NG 2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21833 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21834
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG 2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21834 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21835
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG 2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG 2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21836 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21837
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG 2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21838 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21838
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21838 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21839
21042	1/3-30cal_Metophacepeterise (rowconservative_ecgeneral)	2044_NZ-NG	02 reiteilt (3tj/100-3tj)	3.00	ALT 1_0110_111dustrow_3_batariep_30cai0as.xisx, 1. bata_riep_111dustrial, cell A121659

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1		•	•	•				
2	Tab Contents							
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ				
3	Industrial GHG Calc" to produce the results in "4. Calculations"							
4	In this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious" market scenarios.							
5								
6	Equipment ID	Fuel Type	Parameter	Value	Reference			
21844	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21841			
	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21842			
21846	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21843			
21847	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21844			
21848	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	137020.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21845			
21849	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21846			
21850	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21847			
21851	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	1187670.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21848			
21852	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21849			
21854	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21851			
21855	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21852			
21856	73-SoCal_AeroSpaceDefense (LowConservative_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21853			
21997	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21994			
21998	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	45248.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21995			
21999	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21996			
22000	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21997			
22001	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	964650.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21998			
22002	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT21999			
22004	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22001			
22005	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22002			
22006	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22003			
22007	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22004			
22008	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	53711.42	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22005			
22009	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22006			
22010	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22007			
22011	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22008			
22012	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22009			
22014	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22011			
22015	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22012			
22016	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22013			
22017	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22014			
_	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22015			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22016			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22017			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22018			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22019			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22021			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22022			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22023			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22024			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22025			
22029	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22026			

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1								
2	Tab Contents				-			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	p_Industrial" tab						
3	Industrial GHG Calc" to produce the results in "4. Calculations".							
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.				
5					<u>-</u>			
6	Equipment ID	Fuel Type	Parameter	Value	Reference			
22030	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22027			
22031	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	1029648.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22028			
22032	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22029			
22034	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22031			
22035	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22032			
22036	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22033			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22034			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22035			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22036			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22037			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22038			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22039			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22041			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22042			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22043			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22044			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22045			
_	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22046			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22047			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22048			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22049			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22051			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22052			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22053			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22054			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22055			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22056			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22057			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22058			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22059			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	NG CHA EE (NAT CHA (MANRE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22061			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22062			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22063			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22064			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22065			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22066			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22067			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22068			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22069			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	NG CHA EE (NAT CHA (MANREW)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22071			
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22072			
22076	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22073			

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					•
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2207	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22074
22078	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	97629.08	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22075
22079	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22076
22080	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22077
22083	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	1092849.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22078
22082	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22079
22084	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22081
22085	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22082
22086	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22083
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22084
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	102087.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22085
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22086
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22087
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22088
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22089
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22091
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22092
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22093
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22094
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22095
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22096
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22097
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22098
<u> </u>	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22099
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22101
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22102
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22103
	774-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22104
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22105
-	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22106
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22107
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens) 274-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22108
	74-Socal_AeroSpaceDefense (LowConservative_EcOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22109 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22111
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens) 74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens) 74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG 2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22112 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22113
	774-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2041_H2-NG 2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22113 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22114
	74-Socal_AeroSpaceDefense (LowConservative_EcOvens)	2042_H2-NG 2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22114 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22115
	74-Socal_AeroSpaceDefense (LowConservative_EcOvens) 74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG 2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		
	74-Socal_AeroSpaceDefense (LowConservative_EcOvens) 74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG 2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22116 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22117
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG 2042_H2-NG	BSL NG Consumption (MMBtu/yr)		
	-	-			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22118
2212	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22119

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab			
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22124	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22121
22125	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22122
22126	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22123
22127	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22124
22128	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	127062.70	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22125
22129	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22126
22130	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22127
22131	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	1159953.17	' ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22128
22132	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22129
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22131
22135	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22132
22136	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22133
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22134
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		. ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22135
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22136
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22137
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22138
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22139
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22141
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22142
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22143
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22144
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22145
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22146
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22147
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22148
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22149
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22151
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22152
	74-SoCal_AeroSpaceDefense (LowConservative_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22153
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22294
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22295
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22296
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22297
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22298
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22299
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	NG COLA EF (MT COLA (MANDE))		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22301
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22302
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2030_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22303
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22304
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22305
22309	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	/6.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22306

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1		•		•	
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenario	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22310	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22307
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22308
22312	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22309
22314	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22311
22315	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22312
22316	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22313
22317	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22314
22318	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	61573.54	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22315
22319	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22316
22320	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22317
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	1013255.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22318
22322	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22319
22324	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22321
22325	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22322
22326	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22323
22327	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22324
22328	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	68857.34	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22325
22329	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22326
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22327
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22328
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22329
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22331
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22332
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22333
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22334
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22335
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22336
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22337
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22338
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22339
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22341
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22342
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22343
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22344
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22345
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22346
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22347
_	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22348
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22349
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22351
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22352
22356	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22353

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2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"			•	
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenario	OS.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22357	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22354
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	87518.93	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22355
22359	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22356
22360	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22357
22361	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	1075027.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22358
22362	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22359
22364	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22361
22365	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22362
22366	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22363
22367	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22364
22368	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	92784.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22365
22369	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22366
22370	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22367
22371	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	1086078.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22368
22372	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22369
22374	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22371
22375	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22372
22376	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22373
22377	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22374
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22375
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22376
22380	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22377
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22378
22382	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22379
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22381
22385	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22382
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22383
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22384
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22385
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22386
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22387
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22388
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22389
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22391
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22392
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22393
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22394
_	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22395
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22396
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22397
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22398
22402	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22399

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	· .			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22404	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22401
22405	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22402
22406	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22403
22407	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	B ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22404
22408	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	115515.68	B ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22405
22409	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22406
22410	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22407
22411	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	1135580.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22408
22412	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22409
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22411
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22412
22416	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22413
22417	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22414
22418	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	121505.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22415
22419	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22416
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22417
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	1150039.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22418
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22419
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22421
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22422
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22423
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22424
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22425
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22426
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22427
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22428
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22429
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22431
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22432
_	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22433
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22434
-	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22435
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22436
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22437
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22438
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22439
-	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22441
-	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22442
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22443
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22444
	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22445
22449	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22446

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22450	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22447
22451	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	1187670.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22448
22452	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22449
22454	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22451
22455	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22452
22456	75-SoCal_AeroSpaceDefense (LowConservative_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22453
22597	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22594
22598	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	45248.89	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22595
22599	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22596
22600	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22597
22601	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	964650.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22598
22602	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22599
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22601
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22602
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22603
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22604
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22605
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22606
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22607
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22608
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22609
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22611
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22612
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22613
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22614
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22615
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22616
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22617
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22618
22622	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22619
22624	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22621
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22622
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22623
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22624
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22625
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Rland % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22626
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22627
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22628
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22629
22634	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22631
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22632
22636	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22633

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1		_			
2	Tab Contents				_
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tak	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations'	'.			
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22637	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22634
22638	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	75589.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22635
22639	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22636
22640	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22637
22641	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	1049500.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22638
22642	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22639
22644	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22641
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22642
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22643
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22644
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22645
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22646
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22647
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22648
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22649
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22651
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22652
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22653
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22654
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22655
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22656
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines) 76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG 2036_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22657 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22658
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22659 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22659
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22661 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22661
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22662
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22663
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22664
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22665
22669	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22666
22670	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22667
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22668
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22669
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22671
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22672
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22673
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22674
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22675
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22676
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22677
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22678
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	_ 2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22679
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenari	OS.	
5	, , , , , ,		·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22684	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22681
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22682
22686	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22683
22687	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22684
22688	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	102087.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22685
22689	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22686
22690	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22687
22691	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	1106330.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22688
22692	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22689
22694	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22691
22695	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22692
22696	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22693
22697	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22694
22698	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	109056.84	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22695
22699	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22696
22700	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22697
22701	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	1121321.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22698
22702	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22699
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22701
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22702
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22703
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22704
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22705
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22706
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22707
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22708
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22709
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22711
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22712
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22713
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22714
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22715
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22716
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22717
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22718
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22719
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22721
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22722
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22723
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22724
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22725
22729	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22726

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	1
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22730	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22727
2273	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	1159953.17	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22728
22732	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22729
22734	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22731
2273	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22732
2273	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22733
2273	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22734
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22735
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22736
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22737
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	1172340.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22738
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22739
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22741
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22742
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22743
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22744
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22745
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22746
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22747
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22748
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22749
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22751
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22752
	76-SoCal_AeroSpaceDefense (LowConservative_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22753
	777-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22894
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22895
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22896
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22897
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22898
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22899
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	NG CHA EE (MT CHA/MARHU)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22901
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22902
	777-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2030_H2-NG 2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22903 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22904
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG 2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22904 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22905
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG 2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22905 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22906
	77-Socal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG 2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22900 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22907
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG 2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22907 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22908
	77-Socal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22909 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22909
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22909 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22911
	77-Socal_AeroSpaceDefense (MidModerate_EcGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_Industrow_3_DataFrep_SoCalGas.xlsx, 1. Data_Frep_Industrial, Cell AT22911 ALP1_GHG_IndustPow_3_DataFrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22912
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22912 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22913
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22917	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22914
22918	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	82868.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22915
22919	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22916
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22917
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22918
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22919
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22921
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22922
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22923
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22924
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22925
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22926
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22927
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22928
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22929
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22931
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22932
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22933
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22934
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22935
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG 2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22936
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG 2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22937 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22938
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG 2034_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22939 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22939
	77-Socal_AeroSpaceDefense (MidModerate_EcGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_bataPrep_SocalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22941
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22942
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22943
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22944
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22945
	77-SoCal AeroSpaceDefense (MidModerate ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1 GHG IndustPow 3 DataPrep SoCalGas.xlsx, 1. Data Prep Industrial, Cell AT22946
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22947
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22948
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22949
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22951
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22952
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22953
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22954
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22955
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22956
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22957
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22958
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	_ 2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22959
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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tak	o. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
22964	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22961
22965	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22962
22966	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22963
22967	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22964
22968	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	139537.72	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22965
22969	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22966
22970	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22967
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22968
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22969
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22971
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22972
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22973
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22974
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22975
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22976
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22977
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22978
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22979
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22981
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22982
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22983
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22984
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22985
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22986
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22987
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22988
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22989
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22991
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22992
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22993
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22994
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22995
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22996
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22997
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr) O3 Parcent (scf/100 scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22998
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT22999
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23001
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23002
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2040_H2-NG	NG N20 EF (MT N20/MMBtu) Fauin Throughput Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23003
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23004
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23005
23009	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23006

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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	•			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23010	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23007
23013	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	1135580.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23008
23012	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23009
23014	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23011
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23012
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23013
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23014
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23015
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23016
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23017
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23018
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23019
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23021
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23022
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23023
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23024
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23025
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23026
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23027
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23028
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23029
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23031
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23032
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23033
	777-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23034
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23035
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23036
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23037
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG 2044_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23038 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23039
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 477-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG 2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG 2044_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23041 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23042
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG 2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		
	777-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2044_H2-NG 2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23043 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23044
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23045
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23045 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23046
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23046 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23047
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23047 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23048
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23048 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23049
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23049 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23051
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu) NG CH4 EF (MT CH4/MMBtu)		
	77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral) 77-SoCal_AeroSpaceDefense (MidModerate_ECGeneral)	-	NG CH4 EF (MT CH4/MMBtu) NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23052 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23053
23030	p//-30Cal_AerospaceDerense (iviluiviouerate_ecdeneral)	2045_H2-NG	ING INZO EF (IVIT INZO/IVIIVIBLU)	0.00	ALF 1_GITG_ITIGUSTEUW_5_DataFlep_50CalGas.xisX, 1. Data_Flep_ITIGUSTEIdi, Cell A123053

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2	Tab Contents]			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"			·	
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23197	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23194
23198	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	57212.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23195
23199	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23196
23200	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23197
23201	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	964650.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23198
23202	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23199
23204	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23201
23205	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23202
23206	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23203
23207	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23204
23208	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	69987.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23205
23209	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23206
23210	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23207
23211	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23208
23212	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23209
23214	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23211
23215	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23212
23216	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23213
23217	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23214
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23215
23219	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23216
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23217
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23218
23222	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23219
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23221
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23222
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23223
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23224
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23225
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23226
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23227
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23228
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23229
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23231
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23232
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23233
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23234
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23235
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23236
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23237
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23238
23242	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23239

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2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"			·	
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5			· · · · · · · · · · · · · · · · · · ·	-	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23244	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23241
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23242
23246	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23243
23247	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23244
23248	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	118718.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23245
23249	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23246
23250	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23247
23251	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	1066740.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23248
23252	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23249
23254	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23251
23255	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23252
23256	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23253
23257	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23254
23258	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	129127.44	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23255
23259	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23256
23260	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23257
23261	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	1075027.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23258
23262	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23259
23264	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23261
23265	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23262
23266	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23263
23267	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23264
23268	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	139537.72	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23265
23269	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23266
23270	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23267
23271	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	1086078.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23268
23272	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23269
23274	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23271
23275	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23272
23276	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23273
23277	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23274
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	149069.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23275
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23276
23280	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23277
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	1092849.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23278
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23279
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23281
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23282
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23283
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23284
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23285
23289	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23286

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	,II) .			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23290	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23287
23291	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	1106330.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23288
23292	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23289
23294	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23291
23295	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23292
23296	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23293
23297	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23294
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23295
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23296
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23297
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23298
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23299
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23301
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23302
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23303
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23304
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23305
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23306
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23307
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23308
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23309
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23311
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23312
<u> </u>	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23313
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23314
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23315
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23316
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23317
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23318
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23319
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23321
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23322
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23323
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23324
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23325
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23326
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23327
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23328
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23329
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	NG CUA EF (MT CUA (MARP+1)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23331
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23332
23336	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23333

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23337	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23334
23338	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	228014.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23335
23339	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23336
23340	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23337
23341	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	1172340.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23338
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23339
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23341
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23342
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23343
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23344
_	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23345
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23346
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23347
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23348
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23349
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23351
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23352
	78-SoCal_AeroSpaceDefense (MidModerate_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23353
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23494
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23495
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23496
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23497
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23498
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23499
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23501
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23502
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23503
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23504
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23505
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23506
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines) 79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT23507
		2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23508
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT23509
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23511
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23512
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2031_H2-NG	NG N20 EF (MT N20/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23513
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23514
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23515
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23516 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial_Cell AT23517
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23517
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23518
23522	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23519

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23524	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23521
23525	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23522
23526	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23523
23527	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23524
23528	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	94884.37	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23525
23529	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23526
23530	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23527
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23528
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23529
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23531
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23532
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23533
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23534
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23535
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23536
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23537
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23538
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23539
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23541
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23542
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23543
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23544
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23545
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23546
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23547
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23548
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23549
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23551
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23552
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23553
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23554
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23555
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23556
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23557
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines) 79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG 2036_H2-NG	BSL NG Consumption (MMBtu/yr) O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23558
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines) 79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG 2036_H2-NG	O2 Percent (scf/100-scf) NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23559 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23561
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG 2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		
		2036_H2-NG 2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23562
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2036_H2-NG 2037_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23563
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)		Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23564
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Pland (sef/100 sef)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23565
23509	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23566

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					•
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23570	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23567
23573	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	1086078.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23568
23572	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23569
23574	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23571
23575	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23572
23576	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23573
23577	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23574
23578	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	149069.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23575
23579	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23576
23580	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23577
23582	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	1092849.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23578
23582	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23579
23584	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23581
23585	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23582
23586	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23583
23587	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23584
23588	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	159219.07	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23585
23589	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23586
23590	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23587
23593	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	1106330.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23588
23592	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23589
23594	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23591
23595	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23592
23596	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23593
23597	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23594
23598	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	173928.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23595
23599	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23596
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23597
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23598
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23599
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23601
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23602
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23603
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23604
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	188206.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23605
23609	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23606
23610	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23607
23613	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	1135580.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23608
23612	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23609
23614	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23611
23615	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23612
23616	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23613

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep_Social Company of the Com	ep_Industrial" tak	o. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	s".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23617	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23614
23618	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	202204.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23615
23619	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23616
23620	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23617
23621	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	1150039.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23618
23622	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23619
23624	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23621
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23622
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23623
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23624
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23625
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23626
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23627
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23628
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23629
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23631
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23632
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23633
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23634
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23635
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23636
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23637
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23638
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23639
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23641
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23642
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23643
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23644
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23645
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG			ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23646
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines) 79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG 2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23647 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23648
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG 2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23649 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23649
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG 2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23649 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23651
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG 2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23652
	79-SoCal_AeroSpaceDefense (MidModerate_ICEngines) 79-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2045_H2-NG 2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23652 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23653
	80-SoCal_AeroSpaceDefense (MidModerate_ICEngines)	2043_H2-NG 2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23033 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23794
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23794 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23795
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG 2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23796 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23796
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG 2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23796 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23797
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23798 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23798
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG 2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23798 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23799
23002	-loo-2006ai_Mei 02paceDeletise (iviluiviodelate_icTurbifles)	2030_02-110	טב רבונבווג (אנן/ בייט-אנן)	15.00	ALT 1_OHO_HUUSITOW_3_DataFlep_30CalGas.xisx, 1. Data_Flep_Huusifiai, Cell A125799

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23804	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23801
23805	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23802
23806	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23803
23807	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23804
23808	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	69987.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23805
23809	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23806
23810	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23807
23811	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23808
23812	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23809
23814	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23811
23815	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23812
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23813
23817	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23814
23818	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	82868.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23815
23819	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23816
23820	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23817
23821	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	1013255.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23818
23822	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23819
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23821
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23822
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23823
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23824
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23825
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23826
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23827
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23828
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23829
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23831
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23832
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23833
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23834
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23835
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23836
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23837
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23838
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23839
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23841
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23842
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23843
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23844
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23845
23849	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23846

	A	С	D	E	F
1					
2	Tab Contents	1			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23850	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23847
23851	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)	1066740.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23848
23852	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23849
23854	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23851
23855	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23852
23856	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23853
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23854
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23855
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23856
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23857
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23858
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23859
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23861
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23862
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23863
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23864
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23865
_	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23866
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23867
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23868
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23869
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23871
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23872
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23873
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23874
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23875
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23876
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23877
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23878
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23879
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23881
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23882
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23883
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23884
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23885
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23886
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23887
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23888
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23889
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23891
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23892
23896	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23893

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations)".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23897	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23894
23898	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	173928.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23895
23899	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23896
23900	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23897
23901	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	1121321.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23898
-	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23899
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23901
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23902
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23903
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23904
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23905
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23906
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23907
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23908
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23909
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23911
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23912
_	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23913
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23914
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23915
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23916
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23917
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23918
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23919
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines) 80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23921
		2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23922
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines) 80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2042_H2-NG 2043_H2-NG	NG N2O EF (MT N2O/MMBtu) Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23923 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23924
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)		PRJ H2 Demand (MMBtu/yr)		
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG 2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23925 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23926
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23927
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23928 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23928
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23929
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23931
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23932
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23933
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23934
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23935
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23936
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23937
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23938
	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23939
23372	100 00001_//ci/00paceDeterior (ivilativioaciate_iciaibilics)	20-1-1-110	02 / C. CCITE (30)/ 100 30)/	15.00	7.E. 1_6.16data 64_5_batta 1cp_566a16a5.xisA, 1. batta_1 1cp_inadstrial, 6cii A125555

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1		•	•	•	
2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenar	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
23944	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23941
23945	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23942
23946	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23943
23947	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23944
23948	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	241251.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23945
23949	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23946
23950	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23947
23951	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	1187670.81	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23948
23952	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23949
23954	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23951
23955	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23952
23956	80-SoCal_AeroSpaceDefense (MidModerate_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT23953
24097	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24094
24098	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	57212.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24095
24099	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24096
24100	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24097
24101	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	964650.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24098
24102	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24099
24104	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24101
24105	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24102
24106	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24103
24107	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24104
24108	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	69987.77	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24105
24109	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24106
24110	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24107
24111	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24108
24112	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24109
24114	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24111
24115	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24112
24116	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24113
24117	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24114
24118	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	82868.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24115
24119	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24116
24120	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24117
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24118
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24119
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24121
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24122
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24123
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24124
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24125
24129	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24126

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24130	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24127
24131	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)	1029648.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24128
24132	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24129
24134	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24131
24135	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24132
24136	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24133
24137	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24134
24138	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	107026.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24135
24139	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24136
24140	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24137
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	1049500.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24138
24142	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24139
24144	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24141
24145	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24142
24146	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24143
24147	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24144
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24145
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24146
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24147
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24148
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24149
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24151
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24152
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24153
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24154
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24155
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24156
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24157
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24158
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24159
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24161
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24162
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24163
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24164
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24165
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24166
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24167
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24168
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24169
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24171
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24172
241/6	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24173

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenar	ios.	
5			·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24177	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24174
24178	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	149069.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24175
24179	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24176
24180	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24177
24181	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	1092849.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24178
24182	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24179
24184	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24181
24185	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24182
24186	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24183
24187	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24184
24188	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	159219.07	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24185
24189	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	44.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24186
24190	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24187
24191	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)	1106330.85	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24188
24192	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24189
24194	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24191
24195	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24192
24196	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24193
24197	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24194
24198	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)	173928.27	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24195
24199	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	40.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24196
24200	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24197
24201	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)	1121321.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24198
24202	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24199
24204	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24201
24205	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24202
24206	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24203
24207	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24204
24208	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	188206.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24205
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24206
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24207
_	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	1135580.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24208
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24209
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24211
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24212
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24213
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24214
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24215
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24216
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24217
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24218
24222	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24219

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24224	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24221
24225	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24222
24226	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24223
24227	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24224
24228	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	215057.11	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24225
24229	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24226
24230	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24227
24231	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	1159953.17	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24228
24232	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24229
24234	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24231
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24232
24236	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24233
24237	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	81.20	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24234
24238	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	228014.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24235
24239	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24236
24240	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24237
24241	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	1172340.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24238
24242	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	O2 Percent (scf/100-scf)	3.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24239
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24241
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24242
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24243
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24244
_	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24245
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24246
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24247
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24248
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24249
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24251
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24252
	81-SoCal_AeroSpaceDefense (HighAmbitious_ECGeneral)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24253
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24394
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24395
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24396
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24397
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24398
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24399
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24401
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24402
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24403
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24404
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24405
24409	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24406

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations".				
4	In this workbook, the terms "Low", "Mid", and "High" correspo		ervative", "Moderate", and "Ambitious" market scenario	DS.	
5	, , , ,		•		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24410	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24407
24411	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)	987880.49	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24408
24412	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24409
24414	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24411
24415	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24412
24416	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24413
24417	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24414
24418	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	82868.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24415
24419	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	72.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24416
24420	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24417
24421	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	1013255.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24418
24422	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24419
24424	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24421
24425	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24422
24426	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24423
24427	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24424
24428	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)	94884.37	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24425
24429	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	68.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24426
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24427
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24428
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24429
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24431
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24432
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24433
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24434
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24435
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24436
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24437
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24438
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24439
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24441
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24442
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24443
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24444
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24445
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24446
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24447
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24448
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24449
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24451
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24452
24456	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24453

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pro	ep_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations	5".			
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	ios.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24457	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24454
24458	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)	129127.44	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24455
24459	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	56.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24456
24460	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24457
24461	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)	1075027.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24458
24462	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24459
24464	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24461
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24462
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24463
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24464
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24465
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24466
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24467
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24468
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24469
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24471
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24472
_	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24473
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24474
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24475
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24476
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24477
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24478
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24479
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24481
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24482
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24483
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24484
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens) 82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG 2039_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24485
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)				ALP1_GHG_IndustPow_3_DataProp_SoCalGas.xlsx, 1. Data_Prop_Industrial, Cell AT24486
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG 2039_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24487 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24488
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG 2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24488 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24489
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG 2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24469 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24491
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24492
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24493 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24493
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24493 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24494
-	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24494 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24495
-	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24495 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24496
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24490 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24497
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_Industrow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24497 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24498
	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG 2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24498 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24499
24302	02-300ai_AerospaceDerense (HighAnnollious_ECOVENS)	2040_02-110	02 FETCEIII (3CJ/100-3CJ)	19.00	ALF 1_GITG_ITIGUSTEOW_3_DataFTEP_30CalGas.AlsX, 1. Data_FTEP_ITIGUSTITAL, Cell A124499

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1				1	
2	Tab Contents	7			
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenar	OS.	
5			·		'
6	Equipment ID	Fuel Type	Parameter	Value	Reference
2450	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24501
2450	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	_ 2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24502
2450	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24503
2450	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24504
2450	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)	188206.73	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24505
2450	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24506
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24507
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	1135580.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24508
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24509
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24511
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24512
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24513
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24514
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)	202204.50	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24515
2451	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	32.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24516
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24517
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)	1150039.23	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24518
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24519
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24521
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24522
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24523
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24524
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)	215057.11	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24525
2452	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24526
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24527
2453	1 82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	1159953.17	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24528
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24529
2453	4 82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24531
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24532
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24533
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24534
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	228014.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24535
2453	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24536
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24537
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	1172340.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24538
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24539
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24541
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24542
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24543
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	0.24	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24544
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)	241251.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24545
2454	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	20.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24546

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24550	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	Blend % H2 (scf/100-scf)	16.33	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24547
24551	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)	1187670.81	. ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24548
24552	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	O2 Percent (scf/100-scf)	19.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24549
24554	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24551
24555	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24552
24556	82-SoCal_AeroSpaceDefense (HighAmbitious_ECOvens)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24553
24697	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	B ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24694
24698	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)	57212.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24695
24699	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	80.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24696
24700	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24697
24701	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)	964650.06	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24698
24702	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24699
24704	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24701
24705	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24702
24706	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24703
24707	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	B ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24704
24708	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)	69987.77	' ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24705
24709	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	76.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24706
24710	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24707
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24708
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24709
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24711
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24712
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24713
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG			3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24714
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24715
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24716
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24717
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24718
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24719
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24721
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24722
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24723
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24724
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24725
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24726
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24727
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24728
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24729
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24731
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24732
24736	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24733

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1		•	•	•	
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	o Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	_			
4	In this workbook, the terms "Low", "Mid", and "High" correspond		ervative", "Moderate", and "Ambitious" market scenar	OS.	
5			·		
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24737	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24734
24738	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)	107026.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24735
24739	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	64.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24736
24740	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24737
24741	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)	1049500.38	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24738
24742	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24739
24744	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24741
24745	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24742
24746	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24743
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24744
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)	118718.21	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24745
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	60.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24746
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24747
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24748
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24749
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24751
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24752
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24753
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24754
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24755
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24756
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24757
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24758
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24759
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24761
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24762
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24763
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24764
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24765
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24766
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24767
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24768
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24769
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	NG CHA EE (MT CHA/MARE)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24771
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24772
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu) Fauin Throughout Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24773
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu) PRI H2 Demand (MMBtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24774
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr) PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24775
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf) Rland % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24776
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMRtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24777
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24778
24/82	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24779

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"	· .			
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.	1
5					_
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24784	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24781
24785	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24782
24786	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24783
24787	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24784
24788	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)	159219.07	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24785
24789	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24786
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24787
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24788
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24789
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24791
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24792
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24793
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24794
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		7 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24795
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24796
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24797
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24798
_	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24799
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24801
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24802
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24803
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24804
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24805
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24806
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24807
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24808
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24809
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24811
-	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24812
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24813
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24814
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24815
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24816
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24817
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	, , , , , , , , , , , , , , , , , , , ,		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24818
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24819
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	NG CHA EE (MT CHA/MARHU)		5 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24821
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24822
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu) Figure Throughput Fraction (MMBtu/100 MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24823
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		3 ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24824
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24825
24829	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	28.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24826

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1					
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	o_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	ios.]
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
24830	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24827
24831	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)	1159953.17	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24828
24832	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24829
24834	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24831
24835	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24832
24836	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24833
24837	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24834
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)	228014.55	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24835
24839	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	24.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24836
24840	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	Blend % H2 (scf/100-scf)	25.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24837
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)	1172340.18	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24838
24842	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24839
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24841
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24842
24846	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24843
24847	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	12.78	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24844
_	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24845
_	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24846
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24847
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24848
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24849
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24851
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24852
	83-SoCal_AeroSpaceDefense (HighAmbitious_ICEngines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24853
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24994
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24995
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24996
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24997
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24998
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT24999
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25001
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25002
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2030_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25003
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25004
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25005
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25006
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25007
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25008
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25009
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25011
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25012
25016	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2031_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25013

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2	Tab Contents		· · · · · · · · · · · · · · · · · · ·		1
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	p_Industrial" tak			
3	Industrial GHG Calc" to produce the results in "4. Calculations'				
4	In this workbook, the terms "Low", "Mid", and "High" correspond	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
25017	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25014
25018	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ H2 Demand (MMBtu/yr)	82868.45	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25015
25019	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25016
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25017
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	BSL NG Consumption (MMBtu/yr)	1013255.09	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25018
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25019
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25021
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25022
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2032_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25023
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25024
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25025
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25026
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25027
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25028
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25029
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25031
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25032
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2033_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25033
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25034
_	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25035
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25036
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25037
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25038
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25039
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25041
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25042
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2034_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25043
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25044
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25045
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25046
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25047
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25048
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25049
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25051
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25052
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2035_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25053
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25054
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25055
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25056
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25057
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25058
25062	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25059

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2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Prep	_Industrial" tab	. The input data in this tab was processed through the	function in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations"				
4	In this workbook, the terms "Low", "Mid", and "High" correspo	nd to the "Cons	ervative", "Moderate", and "Ambitious" market scenar	OS.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
25064	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25061
25065	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25062
25066	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2036_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25063
25067	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25064
25068	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ H2 Demand (MMBtu/yr)	139537.72	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25065
25069	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	52.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25066
25070	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25067
25071	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	BSL NG Consumption (MMBtu/yr)	1086078.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25068
25072	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25069
25074	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25071
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25072
25076	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2037_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25073
25077	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25074
25078	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ H2 Demand (MMBtu/yr)	149069.46	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25075
25079	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	48.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25076
25080	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25077
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	BSL NG Consumption (MMBtu/yr)	1092849.67	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25078
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25079
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25081
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25082
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2038_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25083
	484-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25084
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25085
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25086
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25087
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25088
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25089
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25091
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25092
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2039_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25093
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25094
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25095
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25096
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25097
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25098
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25099
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25101
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25102
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2040_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25103
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25104
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25105
25109	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)	36.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25106

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1		_			
2	Tab Contents				
	"ALP1_GHG_IndustPow_3_DataPrep_SoCalGas", "1. Data_Pre	ep_Industrial" tab	. The input data in this tab was processed through the f	unction in "3.1 EQ	
3	Industrial GHG Calc" to produce the results in "4. Calculations				
4	In this workbook, the terms "Low", "Mid", and "High" corresp	ond to the "Cons	ervative", "Moderate", and "Ambitious" market scenari	os.	
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
25110	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	Blend % H2 (scf/100-scf)	56.83	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25107
25111	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	BSL NG Consumption (MMBtu/yr)	1135580.16	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25108
25112	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	O2 Percent (scf/100-scf)	15.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25109
25114	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	NG CO2 EF (MT CO2/MMBtu)	0.05	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25111
25115	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	NG CH4 EF (MT CH4/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25112
25116	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2041_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25113
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)	5.79	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25114
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25115
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25116
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25117
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25118
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25119
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25121
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25122
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2042_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25123
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25124
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25125
_	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25126
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25127
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25128
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25129
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25131
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25132
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2043_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25133
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25134
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25135
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25136
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	Blend % H2 (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25137
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25138
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	02 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25139
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25141
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25142
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2044_H2-NG	NG N2O EF (MT N2O/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25143
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	Equip. Throughput Fraction (MMBtu/100-MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25144
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ H2 Demand (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25145
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	PRJ % Overall H2 as Blend (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25146
-	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	Blend % H2 (scf/100-scf) BSL NG Consumption (MAMPtu/ur)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25147
-	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	BSL NG Consumption (MMBtu/yr)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25148
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	O2 Percent (scf/100-scf)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25149
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	NG CO2 EF (MT CO2/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25151
	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	NG CH4 EF (MT CH4/MMBtu)		ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25152
25156	84-SoCal_AeroSpaceDefense (HighAmbitious_ICTurbines)	2045_H2-NG	NG N2O EF (MT N2O/MMBtu)	0.00	ALP1_GHG_IndustPow_3_DataPrep_SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT25153

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Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption (MMBtu/yr) x Equip. Throughput Fraction (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate) (MMBtu/yr) - PRJ Overall H2 Heat Rate) (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = NG CH4 Ef (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

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BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

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PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ % Overall H2 as Blend (scf/100-scf) = Percent of annual hydrogen demand combusted as a blended fuel (sector-wide)

Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

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O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Industrial GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	21.18	MMBtu/100- MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1347
PRJ H2 Demand	0.00	MMBtu/yr	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1348
PRJ % Overall H2 as Blend	60.00	scf/100-scf	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1349
Blend % H2	16.33	scf/100-scf	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1350
Blend % NG	83.67	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	2.45	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	97.55	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	6.13	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blend % NG (Heat)	93.87	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) /

Parameter	Value	Units	Resource
			(%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	0.00	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html

Parameter	Value	Units	Resource
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	23,389.62	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc

Parameter	Value	Units	Resource
			ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	24,019,698,266.72	scf/yr	Calculated Below
PRJ H2 Vol	0.00	scf/yr	Calculated Below
PRJ NG Vol	24,019,698,266.72	scf/yr	Calculated Below
BSL NG Consumption	115,656,653.83	MMBtu/yr	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1351
BSL Overall Heat Rate	24,500,092.23	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	24,500,092.23	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	0.00	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	0.00	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	24,500,092.23	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where

Parameter	Value	Units	Resource
			default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	24,500,092.23	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.049	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,542.44	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	3.00	scf/100-scf	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1352
O2 Correction	1.17	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.02	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1354
NG CH4 EF	0.000001	MT CH4/MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1355

Parameter	Value	Units	Resource
NG N2O EF	0.0000001	MT N2O/MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV1356
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.000000996	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.000000100	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000007	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000010	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	1,299,974.89	MT CO2e/yr	Calculated Below
BSL CH4	730.10	MT CO2e/yr	Calculated Below
BSL N2O	668.85	MT CO2e/yr	Calculated Below
Displaced CO2	0.00	MT CO2e/yr	Calculated Below
Displaced CH4	0.00	MT CO2e/yr	Calculated Below
Displaced N2O	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	1,299,974.89	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	730.10	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	668.85	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ 100%-NG GHG	1,301,373.85	MT CO2e/yr	Calculated Below
PRJ Blend-NG CO2	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	0.00	MT CO2e/yr	Calculated Below
PRJ Overall CO2	1,299,974.89	MT CO2e/yr	Calculated Below
PRJ Overall CH4	730.10	MT CO2e/yr	Calculated Below
PRJ Overall N2O	668.85	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 115,656,653.831582 (MMBtu/yr) x 21.1834697 (MMBtu/100-MMBtu) = 24,500,092.2320522 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 115,656,653.831582 (MMBtu/yr) x 21.1834697 (MMBtu/100-MMBtu) = 24,500,092.2320522 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 0.0 (MMBtu/yr) x 21.1834697 (MMBtu/100-MMBtu) = 0.0 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 24,500,092.2320522 (MMBtu/yr) - 0.0 (MMBtu/yr) = 24,500,092.2320522 (MMBtu/yr)

BSL NG Vol (scf/yr) = 24,500,092.2320522 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 24,019,698,266.7178 (scf/yr)

PRJ NG Vol (scf/yr) = 24,500,092.2320522 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 24,019,698,266.7178 (scf/yr)

PRJ H2 Vol (scf/yr) = 0.0 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) \div 341.0 (Btu/scf) = 0.0 (scf/yr)

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Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) ÷ 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

Fd Blend (scf/MMBtu) = 6.1265945 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 93.8734055 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,542.4406566 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 2.4526217 (lb/100-lb) x 60,920.0 (Btu/lb) + 97.5473783 (lb/100-lb) x 22,446.0 (Btu/lb) = 23,389.6216773 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.0155167 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,542.4406566 (scf/MMBtu) = 0.0528467 (MT CO2/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.0155167 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,542.4406566 (scf/MMBtu) = 0.000001 (MT CH4/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.0155167 (ppm/ppm) \div 8,710.0 (scf/MMBtu) x 8,542.4406566 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = 2.0 (ppm) \div 1,000,000.0 (scf-ppm/scf) \div 385.22 (scf/pmole) x 44.013 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 1.1675978 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000007 (MT/MMBtu)

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.0155167 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} x 44.013 \text{ (lb/pmole)} x 8,542.4406566 \text{ (scf/MMBtu)} x 1.1675978 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.000001 \text{ (MT/MMBtu)}$

BSL CO2 (MT CO2/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 1,299,974.8938327 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 1,299,974.8938327 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 24.5000922 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 730.1027485 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 2.4500092 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 668.8525179 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 1,299,974.8938327 (MT CO2e/yr) + 730.1027485 (MT CO2e/yr) + 668.8525179 (MT CO2e/yr) = 1,301,373.8490991 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 1,299,974.8938327 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 1,299,974.8938327 (MT CO2e/yr)

PRJ 100%-NG CH4 (MT CH4/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 24.5000922 (MT CH4/yr)

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PRJ 100%-NG CH4 (MT CO2e/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 730.1027485 (MT CO2e/yr)

PRJ 100%-NG N2O (MT N2O/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.00000001 (MT N2O/MMBtu) = 2.4500092 (MT N2O/yr)

PRJ 100%-NG N2O (MT CO2e/yr) = 24,500,092.2320522 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 668.8525179 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 1,299,974.8938327 (MT CO2e/yr) + 730.1027485 (MT CO2e/yr) + 668.8525179 (MT CO2e/yr) = 1,301,373.8490991 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.0528467 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0528467 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.00000007 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000007 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 1,299,974.8938327 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 1,299,974.8938327 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 730.1027485 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 730.1027485 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 668.8525179 (MT CO2e/yr) = 668.8525179 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 1,299,974.8938327 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 1,299,974.8938327 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 730.1027485 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 24.5000922 (MT CH4/yr)

PRJ Overall N2O (MT N2O/yr) = 668.8525179 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 2.4500092 (MT N2O/yr)

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PRJ Overall GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 1,301,373.8490991 (MT CO2e/yr) = 1,301,373.8490991 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 0.0 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT COe/yr)

18-SoCal_FoodBeverage (MidModerate_ECOvens) 2035_H2-NG 10/15/2024

Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption (MMBtu/yr) x Equip. Throughput Fraction (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate) (MMBtu/yr) - PRJ Overall H2 Heat Rate) (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = NG CH4 Ef (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

18-SoCal_FoodBeverage (MidModerate_ECOvens) 2035_H2-NG 10/15/2024

BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

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PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ % Overall H2 as Blend (scf/100-scf) = Percent of annual hydrogen demand combusted as a blended fuel (sector-wide)

Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

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O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Industrial GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	0.06	MMBtu/100- MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5247
PRJ H2 Demand	5,042,861.11	MMBtu/yr	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5248
PRJ % Overall H2 as Blend	60.00	scf/100-scf	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5249
Blend % H2	16.33	scf/100-scf	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5250
Blend % NG	75.00	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	4.12	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	95.88	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	10.03	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blend % NG (Heat)	89.97	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) /

Parameter	Value	Units	Resource
			(%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	2,864,368.23	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html

Parameter	Value	Units	Resource
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	24,029.74	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc

Parameter	Value	Units	Resource
			ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	2,950,412,188.74	scf/yr	Calculated Below
PRJ H2 Vol	1,560,113,415.89	scf/yr	Calculated Below
PRJ NG Vol	2,428,844,860.49	scf/yr	Calculated Below
BSL NG Consumption	21,673,963.65	MMBtu/yr	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5251
BSL Overall Heat Rate	3,009,420.43	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	3,009,420.43	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	255,919.98	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	276,078.70	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	531,998.67	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	2,477,421.76	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where

Parameter	Value	Units	Resource
			default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	2,477,421.76	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.049	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files/2017-08/documents/method_19.pdf
Fd Blend	8,435.78	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	19.00	scf/100-scf	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5252
O2 Correction	3.54	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.03	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5254
NG CH4 EF	0.000001	MT CH4/MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5255

Parameter	Value	Units	Resource
NG N2O EF	0.0000001	MT N2O/MMBtu	ALP1_GHG_GHG_IndustPow_3_Dat aPrep_SoCalGas.xlsx, 2. Data_Prep_Power, Cell AV5256
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.000000994	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.000000099	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000022	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000030	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	159,679.85	MT CO2e/yr	Calculated Below
BSL CH4	89.68	MT CO2e/yr	Calculated Below
BSL N2O	82.16	MT CO2e/yr	Calculated Below
Displaced CO2	28,227.85	MT CO2e/yr	Calculated Below
Displaced CH4	15.85	MT CO2e/yr	Calculated Below
Displaced N2O	14.52	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	0.00	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ 100%-NG GHG	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG CO2	130,655.45	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	73.38	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	67.22	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	130,796.05	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	227.43	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	153.25	MT CO2e/yr	Calculated Below
PRJ Overall CO2	130,655.45	MT CO2e/yr	Calculated Below
PRJ Overall CH4	73.38	MT CO2e/yr	Calculated Below
PRJ Overall N2O	447.91	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 21,673,963.6459872 (MMBtu/yr) x 0.0574364 (MMBtu/100-MMBtu) = 12,448.7490764 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 21,673,963.6459872 (MMBtu/yr) x 0.0574364 (MMBtu/100-MMBtu) = 12,448.7490764 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 5,042,861.1130068 (MMBtu/yr) x 0.0574364 (MMBtu/100-MMBtu) = 2,896.4389554 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 12,448.7490764 (MMBtu/yr) - 2,896.4389554 (MMBtu/yr) = 9,552.3101209 (MMBtu/yr)

BSL NG Vol (scf/yr) = 12,448.7490764 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 12,204,655.9572275 (scf/yr)

PRJ NG Vol (scf/yr) = 9,552.3101209 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 9,365,009.922492 (scf/yr)

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PRJ H2 Vol (scf/yr) = 2,896.4389554 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 341.0 (Btu/scf) = 8,493,955.8810271 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) ÷ 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

Fd Blend (scf/MMBtu) = 6.1265945 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 93.8734055 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,542.4406566 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 2.4526217 (lb/100-lb) x 60,920.0 (Btu/lb) + 97.5473783 (lb/100-lb) x 22,446.0 (Btu/lb) = 23,389.6216773 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.0155167 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,542.4406566 (scf/MMBtu) = 0.0528467 (MT CO2/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.0155167 (ppm/ppm) \div 8,710.0 (scf/MMBtu) x 8,542.4406566 (scf/MMBtu) = 0.000001 (MT CH4/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.0155167 (ppm/ppm) $\div 8,710.0$ (scf/MMBtu) x 8,542.4406566 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = 2.0 (ppm) \div 1,000,000.0 (scf-ppm/scf) \div 385.22 (scf/pmole) x 44.013 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 11.0 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000068 (MT/MMBtu)

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.0155167 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} x 44.013 \text{ (lb/pmole)} x 8,542.4406566 \text{ (scf/MMBtu)} x 11.0 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.0000096 \text{ (MT/MMBtu)}$

BSL CO2 (MT CO2/yr) = 12,448.7490764 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 660.530626 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 12,448.7490764 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 660.530626 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 12,448.7490764 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0124487 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 12,448.7490764 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.3709727 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 12,448.7490764 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0012449 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 12,448.7490764 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.3398508 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 660.530626 (MT CO2e/yr) + 0.3709727 (MT CO2e/yr) + 0.3398508 (MT CO2e/yr) = 661.2414496 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

PRJ 100%-NG CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

PRJ 100%-NG CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

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PRJ 100%-NG N2O (MT N2O/yr) = $0.0 \, (MMBtu/yr) \times 0.0000001 \, (MT N2O/MMBtu) = 0.0 \, (MT N2O/yr)$

PRJ 100%-NG N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 9,552.3101209 (MMBtu/yr) x 0.0528467 (MT CO2/MMBtu) = 504.8083503 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 9,552.3101209 (MMBtu/yr) x 0.0528467 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 504.8083503 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 9,552.3101209 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0095139 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 9,552.3101209 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.2835147 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 9,552.3101209 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0009514 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 9,552.3101209 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.2597299 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 504.8083503 (MT CO2e/yr) + 0.2835147 (MT CO2e/yr) + 0.2597299 (MT CO2e/yr) = 505.3515949 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 623.4260988 (MMBtu/yr) x 0.0000096 (MT N2O/MMBtu) = 0.0059781 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 623.4260988 (MMBtu/yr) x 0.0000096 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 1.6320324 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 2,273.0128566 (MMBtu/yr) x 0.0000068 (MT N2O/MMBtu) = 0.0154821 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 2,273.0128566 (MMBtu/yr) x 0.0000068 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 4.2266108 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 504.8083503 (MT CO2e/yr) = 504.8083503 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.2835147 (MT CO2e/yr) = 0.2835147 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 504.8083503 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 504.8083503 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 0.2835147 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 0.0095139 (MT CH4/yr)

PRJ Overall N2O (MT N2O/yr) = 6.1183731 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 0.0224116 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 1.6320324 (MT CO2e/yr) + 4.2266108 (MT CO2e/yr) + 505.3515949 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 511.2102381 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 2,896.4389554 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 153.685051 (MT CO2/yr)

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Displaced CO2 (MT CO2e/yr) = 2,896.4389554 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 153.685051 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 2,896.4389554 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0028964 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 2,896.4389554 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0863139 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 2,896.4389554 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0002896 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 2,896.4389554 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0790728 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 153.685051 (MT CO2e/yr) + 0.0863139 (MT CO2e/yr) + 0.0790728 (MT CO2e/yr) = 153.8504376 (MT COe/yr)

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Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption (MMBtu/yr) x Equip. Throughput Fraction (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate) (MMBtu/yr) - PRJ Overall H2 Heat Rate) (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = NG CH4 Ef (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

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BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

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PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ % Overall H2 as Blend (scf/100-scf) = Percent of annual hydrogen demand combusted as a blended fuel (sector-wide)

Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

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O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Industrial GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	5.79	MMBtu/100- MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9444
PRJ H2 Demand	1,801,052.01	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9445
PRJ % Overall H2 as Blend	60.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9446
Blend % H2	56.83	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9447
Blend % NG	83.67	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	2.45	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	97.55	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	6.13	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blend % NG (Heat)	93.87	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) /

Parameter	Value	Units	Resource
			(%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	26,628.03	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html

Parameter	Value	Units	Resource
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	23,389.62	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc

Parameter	Value	Units	Resource
			ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	12,204,655.96	scf/yr	Calculated Below
PRJ H2 Vol	8,493,955.88	scf/yr	Calculated Below
PRJ NG Vol	9,365,009.92	scf/yr	Calculated Below
BSL NG Consumption	8,308,620.78	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9448
BSL Overall Heat Rate	12,448.75	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	12,448.75	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	2,273.01	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	623.43	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	2,896.44	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	9,552.31	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where

Parameter	Value	Units	Resource
			default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	9,552.31	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.049	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,542.44	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	15.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9449
O2 Correction	11.00	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.02	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9451
NG CH4 EF	0.000001	MT CH4/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9452

Parameter	Value	Units	Resource
NG N2O EF	0.0000001	MT N2O/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT9453
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.000000996	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.000000100	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000068	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000096	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCCAR6
BSL CO2	660.53	MT CO2e/yr	Calculated Below
BSL CH4	0.37	MT CO2e/yr	Calculated Below
BSL N2O	0.34	MT CO2e/yr	Calculated Below
Displaced CO2	153.69	MT CO2e/yr	Calculated Below
Displaced CH4	0.09	MT CO2e/yr	Calculated Below
Displaced N2O	0.08	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	0.00	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ 100%-NG GHG	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG CO2	504.81	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	0.28	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	0.26	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	505.35	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	1.63	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	4.23	MT CO2e/yr	Calculated Below
PRJ Overall CO2	504.81	MT CO2e/yr	Calculated Below
PRJ Overall CH4	0.28	MT CO2e/yr	Calculated Below
PRJ Overall N2O	6.12	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 8,308,620.7816112 (MMBtu/yr) x 5.7870566 (MMBtu/100-MMBtu) = 480,824.5845933 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 8,308,620.7816112 (MMBtu/yr) x 5.7870566 (MMBtu/100-MMBtu) = 480,824.5845933 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 1,801,052.0103696 (MMBtu/yr) x 5.7870566 (MMBtu/100-MMBtu) = 104,227.8986464 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 480,824.5845933 (MMBtu/yr) - 104,227.8986464 (MMBtu/yr) = 376,596.6859469 (MMBtu/yr)

BSL NG Vol (scf/yr) = 480,824.5845933 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 471,396,651.562031 (scf/yr)

PRJ NG Vol (scf/yr) = 376,596.6859469 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 369,212,437.202849 (scf/yr)

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PRJ H2 Vol (scf/yr) = 104,227.8986464 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 341.0 (Btu/scf) = 305,653,661.719548 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) ÷ 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

 $Fd \ Blend \ (scf/MMBtu) = 30.5631852 \ (Btu/100-Btu) \ x \ 5,975.0492449 \ (scf/MMBtu) + 69.4368148 \ (Btu/100-Btu) \ x \ 8,710.0 \ (scf/MMBtu) = 7,874.1119359 \ (scf/MMBtu)$

HHV-lb Blend (Btu/lb) = 14.4984396 (lb/100-lb) x 60,920.0 (Btu/lb) + 85.5015604 (lb/100-lb) x 22,446.0 (Btu/lb) = 28,024.1296537 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.0850333 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 7,874.1119359 (scf/MMBtu) = 0.0520468 (MT CO2/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.0850333 (ppm/ppm) \div 8,710.0 (scf/MMBtu) x 7,874.1119359 (scf/MMBtu) = 0.000001 (MT CH4/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.0850333 (ppm/ppm) $\div 8,710.0$ (scf/MMBtu) x 7,874.1119359 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = 2.0 (ppm) \div 1,000,000.0 (scf-ppm/scf) \div 385.22 (scf/pmole) x 44.013 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 3.5423729 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000022 (MT/MMBtu)

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.0850333 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} x 44.013 \text{ (lb/pmole)} x 7,874.1119359 \text{ (scf/MMBtu)} x 3.5423729 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.0000027 \text{ (MT/MMBtu)}$

BSL CO2 (MT CO2/yr) = 480.824.5845933 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 25.512.5524585 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 480,824.5845933 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 25,512.5524585 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 480,824.5845933 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.4808246 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 480,824.5845933 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 14.3285726 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 480,824.5845933 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0480825 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 480,824.5845933 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 13.1265112 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 25,512.5524585 (MT CO2e/yr) + 14.3285726 (MT CO2e/yr) + 13.1265112 (MT CO2e/yr) = 25,540.0075423 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 234,518.8249151 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 12,443.56885 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 234,518.8249151 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 12,443.56885 (MT CO2e/yr)

PRJ 100%-NG CH4 (MT CH4/yr) = 234,518.8249151 (MMBtu/yr) x 0.0000001 (MT CH4/MMBtu) = 0.2345188 (MT CH4/yr)

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PRJ 100%-NG CH4 (MT CO2e/yr) = 234,518.8249151 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 6.988661 (MT CO2e/yr)

PRJ 100%-NG N2O (MT N2O/yr) = 234,518.8249151 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0234519 (MT N2O/yr)

PRJ 100%-NG N2O (MT CO2e/yr) = 234,518.8249151 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 6.4023639 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 12,443.56885 (MT CO2e/yr) + 6.988661 (MT CO2e/yr) + 6.4023639 (MT CO2e/yr) = 12,456.9598749 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 142,077.8610318 (MMBtu/yr) x 0.0520468 (MT CO2/MMBtu) = 7,394.693291 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 142,077.8610318 (MMBtu/yr) x 0.0520468 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 7,394.693291 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 142,077.8610318 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.1393647 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 142,077.8610318 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 4.1530694 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 142,077.8610318 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0139365 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 142,077.8610318 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 3.8046575 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 7,394.693291 (MT CO2e/yr) + 4.1530694 (MT CO2e/yr) + 3.8046575 (MT CO2e/yr) = 7,402.6510178 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 62,536.7391878 (MMBtu/yr) x 0.0000027 (MT N2O/MMBtu) = 0.1666025 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 62,536.7391878 (MMBtu/yr) x 0.0000027 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 45.4824871 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 41,691.1594585 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) = 0.0914478 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 41,691.1594585 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 24.9652506 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 12,443.56885 (MT CO2e/yr) + 7,394.693291 (MT CO2e/yr) = 19,838.262141 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 6.988661 (MT CO2e/yr) + 4.1530694 (MT CO2e/yr) = 11.1417303 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = 45.4824871 (MT CO2e/yr) + 24.9652506 (MT CO2e/yr) + 3.8046575 (MT CO2e/yr) + 6.4023639 (MT CO2e/yr) = 80.6547591 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 19,838.262141 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 19,838.262141 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 11.1417303 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 0.3738836 (MT CH4/yr)

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PRJ Overall N2O (MT N2O/yr) = 80.6547591 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 0.2954387 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 45.4824871 (MT CO2e/yr) + 24.9652506 (MT CO2e/yr) + 7,402.6510178 (MT CO2e/yr) + 12,456.9598749 (MT CO2e/yr) = 19,930.0586304 (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = 104,227.8986464 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 5,530.3323022 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 104,227.8986464 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 5,530.3323022 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 104,227.8986464 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.1042279 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 104,227.8986464 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 3.1059914 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 104,227.8986464 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0104228 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 104,227.8986464 (MMBtu/yr) x 0.00000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 2.8454216 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 5,530.3323022 (MT CO2e/yr) + 3.1059914 (MT CO2e/yr) + 2.8454216 (MT CO2e/yr) = 5,536.2837152 (MT COe/yr)

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Emissions are calculated using the following equation(s):

BSL Overall Heat Rate (MMBtu/yr) = BSL NG Consumption (MMBtu/yr) x Equip. Throughput Fraction (MMBtu/100-MMBtu)

PRJ Overall Heat Rate (MMBtu/yr) = BSL NG Consumption) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall H2 Heat Rate (MMBtu/yr) = PRJ H2 Demand) (MMBtu/yr) x Equip. Throughput Fraction) (MMBtu/100-MMBtu)

PRJ Overall NG Heat Rate (MMBtu/yr) = PRJ Overall Heat Rate) (MMBtu/yr) - PRJ Overall H2 Heat Rate) (MMBtu/yr)

BSL NG Vol (scf/yr) = BSL Overall Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ NG Vol (scf/yr) = PRJ Overall NG Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf NG (Btu/scf)

PRJ H2 Vol (scf/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-scf H2 (Btu/scf)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

Fd Blend (scf/MMBtu) = Blend % H2 (Heat) (Btu/100-Btu) x Fd (H2 @ 68 F) (scf/MMBtu) + Blend % NG (Heat) (Btu/100-Btu) x Fd NG (scf/MMBtu)

HHV-lb Blend (Btu/lb) = Blend % H2 (Mass) (lb/100-lb) x HHV-lb H2 (Btu/lb) + Blend % NG (Mass) (lb/100-lb) x HHV-lb NG (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = NG CO2 EF (MT CO2/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = NG CH4 Ef (MT CH4/MMBtu) x Correction Blend-H2 Ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = NG N2O EF (MT N2O/MMBtu) x Correction Blend-H2 ratio (ppm/ppm) ÷ Fd NG (scf/MMBtu) x Fd Blend (scf/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Blend-H2 N2O EF (MT N2O/MMBtu) = N2O-ppm H2 (ppm) ÷ Correction Blend-H2 Ratio (ppm/ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd Blend (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

BSL CO2 (MT CO2/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

BSL CO2 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

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BSL CH4 (MT CH4/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

BSL CH4 (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

BSL N2O (MT N2O/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

BSL N2O (MT CO2e/yr) = BSL Overall Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

BSL GHG (MT CO2e/yr) = BSL CO2 (MT CO2e/yr) + BSL CH4 (MT CO2e/yr) + BSL N2O (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

PRJ 100%-NG CO2 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ 100%-NG CH4 (MT CH4/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

PRJ 100%-NG CH4 (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ 100%-NG N2O (MT N2O/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

PRJ 100%-NG N2O (MT CO2e/yr) = PRJ 100%-NG Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-NG GHG (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu)

PRJ Blend-NG CO2 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

PRJ Blend-NG CH4 (MT CH4/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu)

PRJ Blend-NG CH4 (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

PRJ Blend-NG N2O (MT N2O/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu)

PRJ Blend-NG N2O (MT CO2e/yr) = PRJ Blend-NG Heat Rate (MMBtu/yr) x Blend-NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Blend-NG GHG (MT CO2e/yr) = PRJ Blend-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu)

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PRJ Blend-H2 N2O (MT CO2e/yr) = PRJ Blend-H2 Heat Rate (MMBtu/yr) x Blend-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ 100%-H2 N2O (MT N2O/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu)

PRJ 100%-H2 N2O (MT CO2e/yr) = PRJ 100%-H2 Heat Rate (MMBtu/yr) x 100%-H2 N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

PRJ Overall CO2 (MT CO2e/yr) = PRJ 100%-NG CO2 (MT CO2e/yr) + PRJ Blend-NG CO2 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = PRJ 100%-NG CH4 (MT CO2e/yr) + PRJ Blend-NG CH4 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG N2O (MT CO2e/yr) + PRJ 100%-NG N2O (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = PRJ Overall CO2 (MT CO2e/yr) ÷ GWP CO2 (MT CO2e/MT CO2)

PRJ Overall CH4 (MT CH4/yr) = PRJ Overall CH4 (MT CO2e/yr) ÷ GWP CH4 (MT CO2e/MT CH4)

PRJ Overall N2O (MT N2O/yr) = PRJ Overall N2O (MT CO2e/yr) ÷ GWP N2O (MT CO2e/MT N2O)

PRJ Overall GHG (MT CO2e/yr) = PRJ Blend-H2 N2O (MT CO2e/yr) + PRJ 100%-H2 N2O (MT CO2e/yr) + PRJ Blend-NG GHG (MT CO2e/yr) + PRJ 100%-NG GHG (MT CO2e/yr)

Displaced CO2 (MT CO2/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu)

Displaced CO2 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CO2 EF (MT CO2/MMBtu) x GWP CO2 (MT CO2e/MT CO2)

Displaced CH4 (MT CH4/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu)

Displaced CH4 (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG CH4 EF (MT CH4/MMBtu) x GWP CH4 (MT CO2e/MT CH4)

Displaced N2O (MT N2O/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu)

Displaced N2O (MT CO2e/yr) = PRJ Overall H2 Heat Rate (MMBtu/yr) x NG N2O EF (MT N2O/MMBtu) x GWP N2O (MT CO2e/MT N2O)

Displaced GHG (MT CO2e/yr) = Displaced CO2 (MT CO2e/yr) + Displaced CH4 (MT CO2e/yr) + Displaced N2O (MT CO2e/yr)

Where:

Equip. Throughput Fraction (MMBtu/100-MMBtu) = Percentage of sector-level fuel consumed by equipment category (turbine, recip engine, gen EC, heater)

PRJ H2 Demand (MMBtu/yr) = Annual hydrogen demand (sector-wide)

PRJ % Overall H2 as Blend (scf/100-scf) = Percent of annual hydrogen demand combusted as a blended fuel (sector-wide)

Blend % H2 (scf/100-scf) = Proportion of hydrogen to natural gas in blended fuel (sector-wide)

BSL NG Consumption (MMBtu/yr) = Baseline fuel consumption, natural gas (sector-wide)

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O2 Percent (scf/100-scf) = Combustion oxygen percent (for equipment category)

NG CO2 EF (MT CO2/MMBtu) = CO2 emission factor for natural gas (for equipment category)

NG CH4 EF (MT CH4/MMBtu) = CH4 emission factor for natural gas (for equipment category)

NG N2O EF (MT N2O/MMBtu = N2O emission factor for natural gas (for equipment category)

Using the following parameter values:

Table 1. Industrial GHG Calc Calculation Inputs

Parameter	Value	Units	Resource
Equip. Throughput Fraction	12.78	MMBtu/100- MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12744
PRJ H2 Demand	4,163,932.52	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12745
PRJ % Overall H2 as Blend	60.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12746
Blend % H2	25.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12747
Blend % NG	75.00	scf/100-scf	NG makeup based on % H2 selection
Blend % H2 (Mass)	4.12	lb/100-lb	Percentage of H2 in blend by mass. (%-vol H2 * density-H2) / (%-vol NG * density-NG + %-vol H2 * density-H2)
Blend % NG (Mass)	95.88	lb/100-lb	Percentage of NG in blend by mass. (%-vol NG * density-NG) / (%-vol NG * density-NG + %-vol H2 * density- H2)
Blend % H2 (Heat)	10.03	Btu/100-Btu	Percentage of H2 in blend by heat content. (%-vol H2 * HHV-scf-H2) / (%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blend % NG (Heat)	89.97	Btu/100-Btu	Percentage of NG in blend by heat content. (%-vol NG * HHV-scf-NG) /

Parameter	Value	Units	Resource
			(%-vol NG * HHV-scf-NG + %-vol H2 * HHV-scf-H2)
Blending Check Factor	2,864,368.23	MMBtu/yr	Check factor for blending. This is the PRJ MMBtu of blended natural gas, given default (user input) blending assumptions. If this value exceeds overall PRJ natural gas demand, secondary blending assumptions must be made to satisfy energy balance.
			Based on the following assumptions:
			"Blend % H2" = Volume_{Blended- H2} /(Volume_{Blended-H2} + Volume_{Blended-NG})
			Volume_{Blended-H2} = MMBtu_{Blended-H2} * 10^6 (Btu/MMBtu) /HHV_{Blended-H2} (Btu/scf)
			Volume_{Blended-NG} = MMBtu_{Blended-NG} * 10^6 (Btu/MMBtu) /HHV_{Blended-NG} (Btu/scf)
			The above equations can be used to solve for MMBtu_{Blended-NG} in terms of MMBtu_{Blended-H2}.
			This value can be compared to overall MMBtu of PRJ natural gas.
HHV-scf H2	341.00	Btu/scf	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-scf NG	1,020.00	Btu/scf	https://www3.epa.gov/ttnchie1/ap42/c h01/final/c01s04.pdf
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html

Parameter	Value	Units	Resource
HHV-lb NG	22,446.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
HHV-lb Blend	24,029.74	Btu/lb	Calculated Below
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (kg-MT)	1,000.00	kg/MT	
Conv (g-kg)	1,000.00	g/kg	
Conv (Conc-ppm)	1,000,000.00	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (lb-ton)	2,000.00	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
MW (H2)	2.02	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Hydrogen
MW (NG)	19.00	lb/pmole	https://www.engineeringtoolbox.com/ molecular-weight-gas-vapor- d_1156.html
MW (N2O)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Nitrous-Oxide
MW (Air)	28.96	lb/pmole	https://www.engineeringtoolbox.com/a ir-composition-d_212.html
MW (CO2)	44.01	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/carbon-dioxide
MW (CH4)	16.04	lb/pmole	https://pubchem.ncbi.nlm.nih.gov/com pound/Methane
Molar Volume @ 68 F	385.22	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc

Parameter	Value	Units	Resource
			ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
BSL NG Vol	2,950,412,188.74	scf/yr	Calculated Below
PRJ H2 Vol	1,560,113,415.89	scf/yr	Calculated Below
PRJ NG Vol	2,428,844,860.49	scf/yr	Calculated Below
BSL NG Consumption	23,554,614.35	MMBtu/yr	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12748
BSL Overall Heat Rate	3,009,420.43	MMBtu/yr	Calculated Below
PRJ Overall Heat Rate	3,009,420.43	MMBtu/yr	Calculated Below
PRJ 100%-H2 Heat Rate	255,919.98	MMBtu/yr	Calculated in cell
PRJ Blend-H2 Heat Rate	276,078.70	MMBtu/yr	Conditional formula based on "Blending Check Factor". Either based on default "PRJ % Overall H2 as Blend" or, where Blending Check Factor exceeds PRJ Overall NG, the amount of H2 required to blend with the entirety of Overall PRJ NG. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall H2 Heat Rate	531,998.67	MMBtu/yr	Calculated Below
PRJ 100%-NG Heat Rate	0.00	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to zero. In other instances, it is the difference between overall natural gas volume and blended natural gas volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Blend-NG Heat Rate	2,477,421.76	MMBtu/yr	Conditional formula based on "Blending Check Factor". Where

Parameter	Value	Units	Resource
			default blending assumptions result in blended natural gas volume that exceeds overall natural gas volume, this value is set to the overall natural gas demand. In other instances, it is the volume of natural gas required to blend with the blended hydrogen volume. This formula is conditional to satisfy energy balance requirements where default blending assumptions are inadequate.
PRJ Overall NG Heat Rate	2,477,421.76	MMBtu/yr	Calculated Below
Fd (H2 @ 68 F)	5,975.049	scf/MMBtu	Calculated Below
Fd NG	8,710.00	scf/MMBtu	https://www.epa.gov/sites/default/files /2017-08/documents/method_19.pdf
Fd Blend	8,435.78	scf/MMBtu	Calculated Below
Specific Weight H2	364.00	scf/lb	Jahnke, 1993. Appendix A.
O2 Percent	15.00	scf/100-scf	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12749
O2 Correction	3.54	scf/scf	Equation: 20.9 /(20.9 - O2 Percent)
Correction 100%-H2 Ratio	1.37	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
Correction Blend-H2 Ratio	1.03	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
NG CO2 EF	0.05	MT CO2/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12751
NG CH4 EF	0.000001	MT CH4/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12752

Parameter	Value	Units	Resource
NG N2O EF	0.0000001	MT N2O/MMBtu	ALP1_GHG_IndustPow_3_DataPrep _SoCalGas.xlsx, 1. Data_Prep_Industrial, Cell AT12753
Blend-NG CO2 EF	0.05	MT CO2/MMBtu	Calculated Below
Blend-NG CH4 EF	0.000000994	MT CH4/MMBtu	Calculated Below
Blend-NG N2O EF	0.000000099	MT N2O/MMBtu	Calculated Below
N2O-ppm H2	2.00	ppm	See "GHG_sample_calcs.xlsx". Value from Duan et al., 2017. Already-conservative value of 1ppm x 2 (factor of safety) = 2 ppm.
100%-H2 N2O EF	0.0000022	MT N2O/MMBtu	Calculated Below
Blend-H2 N2O EF	0.0000030	MT N2O/MMBtu	Calculated Below
GWP CO2	1.00	MT CO2e/MT CO2	IPCC AR6
GWP CH4	29.80	MT CO2e/MT CH4	IPCC AR6
GWP N2O	273.00	MT CO2e/MT N2O	IPCC AR6
BSL CO2	159,679.85	MT CO2e/yr	Calculated Below
BSL CH4	89.68	MT CO2e/yr	Calculated Below
BSL N2O	82.16	MT CO2e/yr	Calculated Below
Displaced CO2	28,227.85	MT CO2e/yr	Calculated Below
Displaced CH4	15.85	MT CO2e/yr	Calculated Below
Displaced N2O	14.52	MT CO2e/yr	Calculated Below
PRJ 100%-NG CO2	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG CH4	0.00	MT CO2e/yr	Calculated Below
PRJ 100%-NG N2O	0.00	MT CO2e/yr	Calculated Below

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Parameter	Value	Units	Resource
PRJ 100%-NG GHG	0.00	MT CO2e/yr	Calculated Below
PRJ Blend-NG CO2	130,655.45	MT CO2e/yr	Calculated Below
PRJ Blend-NG CH4	73.38	MT CO2e/yr	Calculated Below
PRJ Blend-NG N2O	67.22	MT CO2e/yr	Calculated Below
PRJ Blend-NG GHG	130,796.05	MT CO2e/yr	Calculated Below
PRJ Blend-H2 N2O	227.43	MT CO2e/yr	Calculated Below
PRJ 100%-H2 N2O	153.25	MT CO2e/yr	Calculated Below
PRJ Overall CO2	130,655.45	MT CO2e/yr	Calculated Below
PRJ Overall CH4	73.38	MT CO2e/yr	Calculated Below
PRJ Overall N2O	447.91	MT CO2e/yr	Calculated Below
CO2 Density (@ 68F)	0.05	kg/scf	https://www.engineeringtoolbox.com/g as-density-d_158.html#gsc.tab=0
H2 Density (@ 68F)	0.002	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf
NG Density (@ 68F)	0.018	kg/scf	https://www1.eere.energy.gov/hydrog enandfuelcells/tech_validation/pdfs/fc m01r0.pdf

BSL Overall Heat Rate (MMBtu/yr) = 23,554,614.3469695 (MMBtu/yr) x 12.776352 (MMBtu/100-MMBtu) = 3,009,420.4325173 (MMBtu/yr)

PRJ Overall Heat Rate (MMBtu/yr) = 23,554,614.3469695 (MMBtu/yr) x 12.776352 (MMBtu/100-MMBtu) = 3,009,420.4325173 (MMBtu/yr)

PRJ Overall H2 Heat Rate (MMBtu/yr) = 4,163,932.5243557 (MMBtu/yr) x 12.776352 (MMBtu/100-MMBtu) = 531,998.6748173 (MMBtu/yr)

PRJ Overall NG Heat Rate (MMBtu/yr) = 3,009,420.4325173 (MMBtu/yr) - 531,998.6748173 (MMBtu/yr) = 2,477,421.7577 (MMBtu/yr)

BSL NG Vol (scf/yr) = 3,009,420.4325173 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 2,950,412,188.74241 (scf/yr)

PRJ NG Vol (scf/yr) = 2,477,421.7577 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 1,020.0 (Btu/scf) = 2,428,844,860.49021 (scf/yr)

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PRJ H2 Vol (scf/yr) = 531,998.6748173 (MMBtu/yr) x 1,000,000.0 (Btu/MMBtu) ÷ 341.0 (Btu/scf) = 1,560,113,415.88637 (scf/yr)

Fd (H2 @ 68 F) (scf/MMBtu) = 364.0 (scf/lb) x 1,000,000.0 (Btu/MMBtu) ÷ 60,920.0 (Btu/lb) = 5,975.0492449 (scf/MMBtu)

Fd Blend (scf/MMBtu) = 10.0264628 (Btu/100-Btu) x 5,975.0492449 (scf/MMBtu) + 89.9735372 (Btu/100-Btu) x 8,710.0 (scf/MMBtu) = 8,435.7811798 (scf/MMBtu)

HHV-lb Blend (Btu/lb) = 4.1163829 (lb/100-lb) x 60,920.0 (Btu/lb) + 95.8836171 (lb/100-lb) x 22,446.0 (Btu/lb) = 24,029.7371466 (Btu/lb)

Blend-NG CO2 EF (MT CO2/MMBtu) = 0.05306 (MT CO2/MMBtu) x 1.02625 (ppm/ppm) ÷ 8,710.0 (scf/MMBtu) x 8,435.7811798 (scf/MMBtu) = 0.0527385 (MT CO2/MMBtu)

Blend-NG CH4 (MT CH4/MMBtu) = 0.000001 (MT CH4/MMBtu) x 1.02625 (ppm/ppm) $\div 8,710.0$ (scf/MMBtu) x 8,435.7811798 (scf/MMBtu) = 0.000001 (MT CH4/MMBtu)

Blend-NG N2O (MT N2O/MMBtu) = 0.0000001 (MT N2O/MMBtu) x 1.02625 (ppm/ppm) \div 8,710.0 (scf/MMBtu) x 8,435.7811798 (scf/MMBtu) = 0.0000001 (MT N2O/MMBtu)

100%-H2 N2O EF (MT N2O/MMBtu) = 2.0 (ppm) \div 1,000,000.0 (scf-ppm/scf) \div 385.22 (scf/pmole) x 44.013 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 3.5423729 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.0000022 (MT/MMBtu)

Blend-H2 N2O EF (MT N2O/MMBtu) = $2.0 \text{ (ppm)} \div 1.02625 \text{ (ppm/ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)}$ x 44.013 (lb/pmole) x 8,435.7811798 (scf/MMBtu) x 3.5423729 (scf/scf) \div 2.205 (lb/kg) \div 1,000.0 (kg/MT) = 0.000003 (MT/MMBtu)

BSL CO2 (MT CO2/yr) = 3,009,420.4325173 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 159,679.8481494 (MT CO2/yr)

BSL CO2 (MT CO2e/yr) = 3,009,420.4325173 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 159,679.8481494 (MT CO2e/yr)

BSL CH4 (MT CH4/yr) = 3,009,420.4325173 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 3.0094204 (MT CH4/yr)

BSL CH4 (MT CO2e/yr) = 3,009,420.4325173 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 89.6807289 (MT CO2e/yr)

BSL N2O (MT N2O/yr) = 3,009,420.4325173 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.300942 (MT N2O/yr)

BSL N2O (MT CO2e/yr) = 3,009,420.4325173 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 82.1571778 (MT CO2e/yr)

BSL GHG (MT CO2e/yr) = 159,679.8481494 (MT CO2e/yr) + 89.6807289 (MT CO2e/yr) + 82.1571778 (MT CO2e/yr) = 159,851.6860561 (MT CO2e/yr)

PRJ 100%-NG CO2 (MT CO2/yr) = 0.0 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 0.0 (MT CO2/yr)

PRJ 100%-NG CO2 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 0.0 (MT CO2e/yr)

PRJ 100%-NG CH4 (MT CH4/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.0 (MT CH4/yr)

PRJ 100%-NG CH4 (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 0.0 (MT CO2e/yr)

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PRJ 100%-NG N2O (MT N2O/yr) = $0.0 \, (MMBtu/yr) \times 0.0000001 \, (MT N2O/MMBtu) = 0.0 \, (MT N2O/yr)$

PRJ 100%-NG N2O (MT CO2e/yr) = 0.0 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 0.0 (MT CO2e/yr)

PRJ 100%-NG GHG (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 0.0 (MT CO2e/yr)

PRJ Blend-NG CO2 (MT CO2/yr) = 2,477,421.7577 (MMBtu/yr) x 0.0527385 (MT CO2/MMBtu) = 130,655.445169 (MT CO2/yr)

PRJ Blend-NG CO2 (MT CO2e/yr) = 2,477,421.7577 (MMBtu/yr) x 0.0527385 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 130,655.445169 (MT CO2e/yr)

PRJ Blend-NG CH4 (MT CH4/yr) = 2,477,421.7577 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 2.4624094 (MT CH4/yr)

PRJ Blend-NG CH4 (MT CO2e/yr) = 2,477,421.7577 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 73.3798015 (MT CO2e/yr)

PRJ Blend-NG N2O (MT N2O/yr) = 2,477,421.7577 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.2462409 (MT N2O/yr)

PRJ Blend-NG N2O (MT CO2e/yr) = 2,477,421.7577 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 67.2237779 (MT CO2e/yr)

PRJ Blend-NG GHG (MT CO2e/yr) = 130,655.445169 (MT CO2e/yr) + 73.3798015 (MT CO2e/yr) + 67.2237779 (MT CO2e/yr) = 130,796.0487484 (MT CO2e/yr)

PRJ Blend-H2 N2O (MT N2O/yr) = 276,078.6991424 (MMBtu/yr) x 0.000003 (MT N2O/MMBtu) = 0.8330918 (MT N2O/yr)

PRJ Blend-H2 N2O (MT CO2e/yr) = 276,078.6991424 (MMBtu/yr) x 0.000003 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 227.4340599 (MT CO2e/yr)

PRJ 100%-H2 N2O (MT N2O/yr) = 255,919.9756749 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) = 0.5613497 (MT N2O/yr)

PRJ 100%-H2 N2O (MT CO2e/yr) = 255,919.9756749 (MMBtu/yr) x 0.0000022 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 153.2484685 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 130,655.445169 (MT CO2e/yr) = 130,655.445169 (MT CO2e/yr)

PRJ Overall CH4 (MT CO2e/yr) = 0.0 (MT CO2e/yr) + 73.3798015 (MT CO2e/yr) = 73.3798015 (MT CO2e/yr)

PRJ Overall N2O (MT CO2e/yr) = 227.4340599 (MT CO2e/yr) + 153.2484685 (MT CO2e/yr) + 67.2237779 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 447.9063063 (MT CO2e/yr)

PRJ Overall CO2 (MT CO2/yr) = 130,655.445169 (MT CO2e/yr) ÷ 1.0 (MT CO2e/MT CO2) = 130,655.445169 (MT CO2/yr)

PRJ Overall CH4 (MT CH4/yr) = 73.3798015 (MT CO2e/yr) ÷ 29.8 (MT CO2e/MT CH4) = 2.4624094 (MT CH4/yr)

PRJ Overall N2O (MT N2O/yr) = 447.9063063 (MT CO2e/yr) ÷ 273.0 (MT CO2e/MT N2O) = 1.6406824 (MT N2O/yr)

PRJ Overall GHG (MT CO2e/yr) = 227.4340599 (MT CO2e/yr) + 153.2484685 (MT CO2e/yr) + 130,796.0487484 (MT CO2e/yr) + 0.0 (MT CO2e/yr) = 131,176.7312767 (MT CO2e/yr)

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Displaced CO2 (MT CO2/yr) = 531,998.6748173 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) = 28,227.8496858 (MT CO2/yr)

Displaced CO2 (MT CO2e/yr) = 531,998.6748173 (MMBtu/yr) x 0.05306 (MT CO2/MMBtu) x 1.0 (MT CO2e/MT CO2) = 28,227.8496858 (MT CO2e/yr)

Displaced CH4 (MT CH4/yr) = 531,998.6748173 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) = 0.5319987 (MT CH4/yr)

Displaced CH4 (MT CO2e/yr) = 531,998.6748173 (MMBtu/yr) x 0.000001 (MT CH4/MMBtu) x 29.8 (MT CO2e/MT CH4) = 15.8535605 (MT CO2e/yr)

Displaced N2O (MT N2O/yr) = 531,998.6748173 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) = 0.0531999 (MT N2O/yr)

Displaced N2O (MT CO2e/yr) = 531,998.6748173 (MMBtu/yr) x 0.0000001 (MT N2O/MMBtu) x 273.0 (MT CO2e/MT N2O) = 14.5235638 (MT CO2e/yr)

Displaced GHG (MT CO2e/yr) = 28,227.8496858 (MT CO2e/yr) + 15.8535605 (MT CO2e/yr) + 14.5235638 (MT CO2e/yr) = 28,258.2268101 (MT COe/yr)

Appendix C.5: Production

GHG Results, Calculations, and Data

A B C D E G H I J K L M N

Tab Contents

This tab compiles relevant information on potential thermal efficiency for the external combustion unit fueled by hydrogen and calculates an average value to use in the calculations.

Purchasing Energy-Efficient Large Commercial Boilers | Department of Energy

Product Class	Rated Capacity	Fuel	Heating Medium	Efficiency* (%)
Large Gas-Fired Hot Water	>2,500,000 Btu/h and ≤10,000,000 Btu/h	Gas	Hot Water	E _c ≥ 96.0
Large Gas-Fired Steam	>2,500,000 Btu/h and ≤10,000,000 Btu/h	Gas	Steam	E _t ≥ 83.0
Large Oil-Fired Hot Water	>2,500,000 Btu/h and ≤10,000,000 Btu/h	Oil	Hot Water	E _c ≥ 89.0
Large Oil-Fired Steam	>2,500,000 Btu/h and ≤10,000,000 Btu/h	Oil	Steam	E _t ≥ 85.5

*Both thermal efficiency (E_t) and combustion efficiency (E_c) are based on 10 CFR Part 431.86 - Uniform test method for the measurement of energy efficiency of commercial packaged boilers.

Table 4. Calculation results.

Fuel	Natural	Mixtur	gas and	Hydrogen	
	gas		hydrogen		
Proportion of hydrogen in the mixture	0	0.25	0.5	0.75	1
Fuel combustion heat, kJ/m3	36832.7	30314.5	23796.4	17278.2	10760.0
Actual air consumption, m ³ /m ³	10.0692	8.1650	6.2608	4.3566	2.4524
Specific consumption of fume gases, m ³ /m ³	11.0941	9.0587	7.0233	4.9878	2.9524
Fume gases composition, volume percentages:					
CO ₂	9.3878	8.6229	7.4146	5.2202	0.0000
H ₂ O	18.2783	19.5487	21.5556	25.2005	33.8710
O_2	0.5551	0.5513	0.5452	0.5342	0.5081
N_2	71.7788	71.2771	70.4845	69.0451	65.6210
Furnace 1			V. 10. V.		200 C 200 P C 20 C C C C C C C C C C C C C C C C C
Temperatures of fume gases leaving the furnace, °C	915	911	900	883	880
Air heating temperature, °C	352	350	341	328	319
Fuel consumption for furnace, m3/year	6151	7439	9405	12790	20253
Fuel utilization rate	0.7102	0.7134	0.7187	0.7277	0.7379
Efficiency coefficient of the furnace, %	36.2	36.3	36.6	37.1	37.6
Mass emission of CO ₂ , kg/m ³ of fuel	2.046	1.534	1.023	0.511	0.000
Specific emission of CO ₂ , kg/t of metal	125.84	114.14	96.20	65.41	0.00
Annual emission of CO2, thousand t/year	88.09	79.90	67.34	45.79	0
Furnace 2					
Temperatures of fume gases leaving the furnace, °C	860	856	842	825	820
Air heating temperature, °C	450	449	449	444	425
Fuel consumption for furnace, m3/year	4562	5523	6956	9466	15166
Fuel utilization rate	0.7752	0.778	0.7866	0.7959	0.7980
Efficiency coefficient of the furnace, %	48.8	48.9	49.5	50.1	50.2
Mass emission of CO ₂ , kg/m ³ of fuel	2.046	1.534	1.023	0.511	0.000
Specific emission of CO ₂ , kg/t of metal	93.33	84.74	71.15	48.41	0.00
Annual emission of CO2, thousand t/year	65.33	59.32	49.81	33.89	0

pdf (iop.org)
https://iopscience.iop.org/article
/10.1088/17551315/1156/1/012035/pdf

Take the case of a theoretical packaged boiler running at around 600 PSIG and at 750°F that can deal with 100,000 lbs per hour. Efficiency will be lower with hydrogen (less than 80%) at high heating value (HHV) compared to natural gas (84%). But this can be misleading. At a low heating value (LHV), hydrogen efficiency risen to almost 95% whereas natural gas at LHV is only 93%. The important thing is to know whether you are dealing with HHV or LHV numbers. Confusion could lead to misunderstandings and miscalculations.

Boilers running on hydrogen: What you need to know (power-eng.com)

https://www.power-eng.com/hydrogen/boilers-running-on-hydrogen-what-you-need-to-know/

Unit	Efficiency	Source
Large Gas-	96%	US DOE
Large Gas-	83%	US DOE
Hydrogen	37.6	Gupalo et al.
Hydrogen-	50.2	Gupalo et al.
HHV Hydro	75%	Gerardo Lara
LHV Hydro	95%	Gerardo Lara
Average	73%	

*Article states "Efficiency will be lower with hydrogen (less than 80%) at high heating value". Used 75% in the absence of an exact value.

	Α	В
1		
2		Tab Contents
		Additional information on combustion ratio process used to develop calculations in Tab 3.
		External_Comb_Calcs_H2. This relates to the raw data in Tabs 6. External_Comb_Heat_Rating and 7.
3		PNNL_SMR_Facilities.
4		
5		Development of the Combustion Ratio:
		To calculate N2O emissions from the external combustion unit within the steam reforming process, a
		heat rating per unit of hydrogen produced was required. To estimate an appropriate heat rating for
		the steam reforming process, air permits for existing steam methane reforming plants were
		reviewed. Only standalone SMR production facilities, external combustion units with a given heat
		rating rather than a "not-to-exceed", and facilities with no more than 2 external combustion units
6		were reviewed.
		The external combustion unit heat rating was compared against the plant hydrogen production
		capacity to develop a ratio of (MMBtu/hr) / (MMscf/day H2 production) ratio. For facilities where
		the plant H2 production capacity was not stated in the air permit, the facility H2 production capacity
		was gathered from the Pacific Northwest National Laboratory (PNNL) Hydrogen Analysis Resource
		Center North American Merchant Hydrogen Plant Production Capacity list (shown on tab
		"PNNL_SMR_Facilities"). Of the facilities considered, the highest (MMBtu/hr) / (MMscf/day H2
		production) ratio was 3.71 MMBtu/hr per MMscf/day H2 production, and the average was 2.97
7		MMBtu/hr per MMscf/day H2 production.
		Three calculation cases were established: the Maximum Ratio Case using the average plus standard
		deviation for the ratio value, the Average Ratio Case using the average ratio, and the Minimum Ratio
8		Case using the average ratio minus the standard deviation for the ratio value.

6. External_Comb_Heat_Rating

	А	В	С	D	Е	F	G	Н	ı	J	Q	R	S			
1																
2		Tab Contents														
		This tab calculates the averag	ge MMBtu/hr to	MMs	cf/day of H2 prod	luction ratio l	based on the data	shown for t	four existing SMR	facilities for						
3		which the necessary informa	tion was publicl	y avail	able. "H2 Produc	tion Capacity	" and "Furnace/H	eater Rating	" are from facility	data.						
4																
		ated at H2 Production Furnace/Heater Rating/Capacity Production														
	Co-Located at				H2 Production		Furnace/Heater		Rating/Capacity	Production						
	Refinery or				Capacity		Rating		1 -	Capacity						
5	No. Units	Company	City	State	(MMscf/day)	Units	(MMBtu/hr)	Units	MMscf/day)	(MMScf/yr)						
6	No	Praxair	Niagara Falls	NY	22.5	MMscf/day	46.01	MMBtu/hr	2.04	8,212.50						
7		Shell (from calc workbook)	San Francisco	CA	4.23	MMscf/day	15.69	Mmbtu/hr	3.71	1,543.95						
8		Air Products	Hamilton	ОН		MMscf/day		MMBtu/hr	2.696	839.50						
9	2 units	Hoeganaes Corporation	Gallatin	TN	0.75	MMscf/day	2.58	MMBtu/hr	3.44	273.75						
10										1						
21								Avg	2.97							
22								Std Dev	0.652							
23 24																
24																

	A	В	С	D	E	F	G	Н	1	J	К	L	М
1				1					·I			I	
2		Tab Contents											
3		This tab demonstrates the convers	sion from 2.00 p _l	om N2O to 0.001	L6 lb N2O/MMBtu.								
4													
9													
10		Factor	Value	Units	Source								
11		Fd CH4	8710.0	0 scf/mmbtu	Table 19-2 F-Factors for Various Fuels, EPA Metho	od 19 https	s://www.ep	a.gov/sites/de	efault/files/	'2017-08/de	ocuments/	method_19.	pdf
12		Fd H2	5975.0	5 scf/mmbtu	Jahnke 1993								
17		Correction 100% H2 Ratio	1.3	7 ppm/ppm	https://research.gatech.edu/sites/default/files/in	line-files/g	gt_epri_nox	emission_h2	short pap	oer.pdf			
18		O2%	3.3	6 scf/100 scf	This is the O2% required to convert between 0.00	62 lb/mm	btu to 5 pp	m from South	Coast Rule	1146			
19		Corrected Oxygen	1.1	.7 scf/scf	Using 3% O2 for the N2O calculation								
20		O2 Correction %	1.1	.9 scf/scf	Calculated: 20.9/(20.9 -O2%)								
21		Molar Volume	385.3	1 dscf/lb-mol	1 atm and 68 F								
23 24 25		Molar Weight N2O	44.0	1 g/mol									
24		Conv (Conc-ppm)	1000000.0	0 scf-ppm/scf	https://www.omnicalculator.com/conversion/ppi	m							
25		Conv (lb-ton)	2000.0	0 lb/ton									
30		N2O H2 EF - Combustion	2.0	0 ppm	Conservative Estimate based on Scienfitic Literatu	ıre							
31		N2O H2 EF - Combustion	0.001	.6 lb/mmbtu	Calculated								
32													
36 37		N20 (C) . M. I	u_{ab} ($dscf$) v_{ab} (scf) , ;	20.9	N O E			lb 、		
37		$N20 ppm \div Conv (Conv)$	опс — ррт) ÷ Molar	Volume $\left(\frac{dscf}{lb-mol}\right) * Fd H_2 \left(\frac{scf}{MMbtu}\right)$	$\int * ({20.9})$	${0-O_2\%}$) :	$= N_2 U Em$	ission F	actor $(\frac{1}{N})$	${MBtu}$)		
38							- 2			-			
39 40		a 1 scf	, , ,1 lb	-mol,	g g scf scf	0.00	a lb						
		$2 ppm * (\frac{10000000 scf}{1000000})$	$\frac{1}{285}$) * ($\frac{1}{285}$	$\frac{1}{dscf}$) * 44.	$01\frac{g}{mol} * 5975.05\frac{scf}{MMbtu} * 1.17\frac{scf}{scf} =$	= 0.00	$16\frac{1}{MMht}$						
41		1,000,000 30 -	ρμιι 303	usej	mot mmbta stj		IVI IVI D C	·u					

	Л В С	1	1 1	к	1	М	N	0	Р	0	R	ς	т	п	V	w	Х
1	, lpl	<u>'</u>	<u> </u>		- 1	141	14		<u>'</u>	<u> </u>	.,]	J I	' 1	<u> </u>	<u>v</u>	** 1	
2	Tab Contents																
	This tab calculates est	timated N2O omis	cions from the com	hustian of hydro	an portho MANAR	tu of fuol											
	required to produce t																
	conversion factors an																
	calculation process, a																
4	Combustion Ratio" ta	b for a more detai	led description of t	the ratios present	ed in rows 19 thro	ough 21.											
4																	
5																	
6	Conversion Factor	ors															
7	Metric	Unit	Value	Source													
8	HHV	Btu/ lb	60,920	Fuels - Higher and	d Lower Calorific V	'alues (engineerin	gtoolbox.com)										
9	Days per year	Days/yr	365														
10	Hours per year	hrs/yr	8,760														
11	tons/ 000 tons	tons/ 000 tons	1,000														
12	Conv (lb-short ton)	lbs/ton	2,000														
13	Conv (Btu-MMBtu)	Btu/ MMBtu	1,000,000														
14	Conv (kg-MT)	kg/MT	1,000														
15	_	kg/short tons	907.18474														
16	H2 Weight	lb/scf		https://keengas.c	om/gases/hydrog	en/											
17	Conv (lb-MT)	lb/MT	· ·		in.com/weight-ma		nt-to-pounds-lh h	tml									
18	Conv (scf-MMscf)	scf/MMscf	1,000,000	inteps.// converter	micomy weight me	233/11/04/10 10/13 11	it to pourids io.ii	CTTT									
19	Thermal Efficiency	%		See Tab 9. Therm	al Efficiency												
19 20 21	Ratio High	MMBtu/hr per			icilities with 1 exte	ernal combustion	unit not co-locat	ed at a refinery									
21	Ratio Mid	MMBtu/hr per			icilities with 1 exte												
22	Ratio Low	MMBtu/hr per			icilities with 1 exte												
25	N2O EF	lb/MMBtu				erriai combustion	unit not co-locat	eu at a reilliery									
26	NZU EF	ID/IVIIVIBLU	0.00159	Calculated on EF_	_CONV_Calc tab												
26	0 0	10 /2	an an: / \														
27	Overall H2 Deman	d Summary (N	/liviBtu/yr)														
28 29 30		Year															
29	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
30	Conservative Demand	15,040,062.3		26,900,972.6	35,707,219.6	46,561,611.0	59,735,032.8	73,422,447.5	87,074,152.2	100,699,231.8	114,375,347.3	128,276,215.2	143,683,410.2	160,384,717.4	178,390,112.3	197,651,320.2	218,158,246.0
31	Moderate Demand	32,394,468.3	41,292,519.5	52,582,755.2	66,333,697.1	82,842,546.7	102,244,522.4	122,832,229.3	144,191,023.0	165,952,404.4	188,331,988.9	211,611,166.4	237,174,477.0	264,300,900.7	293,070,542.4	323,447,348.2	355,381,942.7
32	Ambitious Demand	126,886,641.5	149,054,169.1	173,491,362.2	200,485,117.1	230,240,132.6	262,745,046.8	296,544,623.4	333,310,118.9	370,083,058.7	408,188,959.4	448,126,955.5	488,985,592.8	531,870,935.3	576,956,761.4	623,776,900.6	672,551,001.0
33																	
34	Overall H2 Deman	d Produced by	SMR (MMBtu	ı/yr)													
35		Year	,	•													
36	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
37	Conservative Demand			26,900,972.6	35,707,219.6	46,561,611.0	59,735,032.8	73,422,447.5	87,074,152.2		114,375,347.3	128,276,215.2	143,683,410.2	160,384,717.4	178,390,112.3	197,651,320.2	218,158,246.0
38	Moderate Demand	32,394,468.3		52,582,755.2	66,333,697.1	82,842,546.7	102,244,522.4	122,832,229.3		165,952,404.4		211,611,166.4	237,174,477.0	264,300,900.7	293,070,542.4	323,447,348.2	355,381,942.7
39	Ambitious Demand								333,310,118.9			448,126,955.5	488,985,592.8	531,870,935.3	576,956,761.4	623,776,900.6	
40	7 indicious Demana	120,000,041.5	1+3,03+,103.1	173,431,302.2	200,403,117.1	230,240,132.0	202,743,040.0	230,344,023.4	333,310,110.3	370,003,030.7	400,100,333.4	440,120,333.3	400,303,332.0	331,070,333.3	370,330,701.4	023,770,300.0	072,331,001.0
40	H2 Demand (MT/yr) = H	12 Demand (MAA	tu/vr) * 1 000 000	Rtii/MMARtii * /1	/60920 R+11/lh\ *	(1/2204 & Ib/NAT	1										
42						(1/2204.0 ID/ WIT											
	H2 Demand Produ	•	ummary (ivietr	ic rons/year)													
43		Year															
44	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
45	Conservative Demand	,	· ·	200,298.8	265,868.2	346,687.6	444,774.0	546,687.5	648,335.1	749,784.5	851,613.9	955,116.7	1,069,835.3	1,194,189.6	1,328,253.8	1,471,668.6	1,624,358.7
46	Moderate Demand	241,202.1	307,455.1	391,519.7	493,906.2	616,827.5	761,290.4	914,582.0	1,073,614.9	1,235,645.4	1,402,278.9	1,575,610.6	1,765,949.4	1,967,926.8	2,182,139.3	2,408,318.4	2,646,096.4
47	Ambitious Demand	944,770.2	1,109,824.8	1,291,778.8	1,492,768.4	1,714,317.8	1,956,342.3	2,208,006.5	2,481,754.4	2,755,557.7	3,039,285.9	3,336,655.5	3,640,880.0	3,960,194.9	4,295,894.1	4,644,506.7	5,007,668.0
48																	
			<u> </u>			·	·	<u> </u>			<u> </u>	<u> </u>	. <u></u>	<u> </u>			

А	В С	1	J	К	L	М	N	0	Р	Q	R	S	Т	U	V	w	Х
49	H2 Demand (kg/yr) = H2 I	Demand (MT/yr) *	* 1000 (kg/MT)	<u>'</u>	<u> </u>	<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>	<u>'</u>			<u>, </u>	<u>, </u>			,		
50	H2 Demand Produc	ed by SMR Sur	mmary (kg/ye	ar)													
51 52 53		Year															
52	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
53	Conservative Demand					346,687,593.8	444,774,017.4	546,687,519.7	648,335,133.6					1,194,189,602.6			
54	Moderate Demand		307,455,088.1					914,581,971.7									
55 56	Ambitious Demand	944,770,239.9 1	1,109,824,812.3	1,291,778,818.7 1	.,492,768,426.7	1,714,317,778.1	1,956,342,275.0	2,208,006,546.1	2,481,754,401.1	2,755,557,685.9	3,039,285,905.4	3,336,655,508.6	3,640,880,004.3	3,960,194,905.4	4,295,894,126.2	4,644,506,664.6	5,007,667,971.1
57	H2 Demand (MT/day) = H	I2 Demand (MT/v	r) / 265 (days/yr)														
58	H2 Demand Produce																
59		Year	illiary (ivicer	c rons, day,													
59 60	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
61	Conservative Demand	306.8	408.8	548.8	728.4	949.8	1,218.6	1,497.8	1,776.3	2,054.2	2,333.2	2,616.8	2,931.1	3,271.8	3,639.1	4,032.0	4,450.3
62	Moderate Demand	660.8	842.3	1,072.7	1,353.2	1,689.9	2,085.7	2,505.7	2,941.4	3,385.3	3,841.9	4,316.7	4,838.2	5,391.6	5,978.5	6,598.1	7,249.6
63 64	Ambitious Demand	2,588.4	3,040.6	3,539.1	4,089.8	4,696.8	5,359.8	6,049.3	6,799.3	7,549.5	8,326.8	9,141.5	9,975.0	10,849.8	11,769.6	12,724.7	13,719.6
64																	
65	H2 Demand (MMscf/day)				09 lb/scf) * (1/1,0	000,000 scf/MMs	cf)										
66	H2 Demand Produce	•	mmary (MMs	cf/day)													
67		Year											_				
68	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
69 70	Conservative Demand	129.9	173.0	232.3	308.3	402.0	515.7	633.9	751.8	869.4	987.5	1,107.5	1,240.5	1,384.7	1,540.2	1,706.4	1,883.5
71	Moderate Demand Ambitious Demand	279.7 1,095.5	356.5 1,286.9	454.0 1,497.9	572.7 1,730.9	715.2 1,987.8	882.7 2,268.4	1,060.5 2,560.3	1,244.9 2,877.7	1,432.8 3,195.2	1,626.0 3,524.1	1,827.0 3,869.0	2,047.7 4,221.7	2,281.9 4,592.0	2,530.3 4,981.2	2,792.5 5,385.5	3,068.2 5,806.5
72	Ambitious Demand	1,095.5	1,286.9	1,497.9	1,730.9	1,987.8	2,208.4	2,560.3	2,877.7	3,195.2	3,524.1	3,869.0	4,221.7	4,592.0	4,981.2	5,385.5	5,806.5
73	External Combustion (MI	ЛВtu/hr) = H2 Der	mand (MMscf/da	y) * 3.62 (MMBtu	/hr)/(MMscf/da	v)											
74	External Combustio																
75		Year	,		(- 0	,											
76	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
77	Conservative Demand	470.6	627.0	841.7	1,117.2	1,456.9	1,869.0	2,297.3	2,724.4	3,150.8	3,578.7	4,013.6	4,495.7	5,018.2	5,581.6	6,184.3	6,825.9
78	Moderate Demand	1,013.6	1,292.0	1,645.2	2,075.5	2,592.0	3,199.1	3,843.3	4,511.6	5,192.4	5,892.7	6,621.0	7,420.9	8,269.6	9,169.8	10,120.3	11,119.4
79	Ambitious Demand	3,970.1	4,663.7	5,428.3	6,272.9	7,203.9	8,221.0	9,278.5	10,428.9	11,579.4	12,771.7	14,021.3	15,299.7	16,641.6	18,052.2	19,517.2	21,043.3
80 81	Futured Combustion (848	4Dt. () = 5t.	al Cambanatian (N	**************************************	(la (s)												
	External Combustion (MN External Combustio		·			std dowl											
82 83		•	iivibtu/yi j - iv	iaxiiiiuiii Kali	Case (avg +	stu uevj											
84	Scenario	Year 2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
85	Conservative Demand	4,122,319.8	5,492,691.3	7,373,268.2	9,786,966.1	12,762,038.5	16,372,732.2	20,124,305.8	23,866,091.7	27,600,580.0	31,349,056.7	35,159,135.6	39,382,082.6	43,959,731.8	48,894,817.6	54,174,108.2	59,794,836.7
86	Moderate Demand	8,878,976.5	11,317,837.0	14,412,369.6	18,181,355.3	22,706,254.0	28,024,127.6	33,666,997.4	39,521,213.8	45,485,775.2	51,619,779.4	58,000,352.4	65,006,981.8	72,442,043.8	80,327,494.2	88,653,451.0	97,406,381.1
87	Ambitious Demand	34,778,268.3	40,854,150.0	47,552,122.7	54,950,821.5	63,106,352.3	72,015,600.9	81,279,702.5	91,356,730.7	101,435,799.4	111,880,218.3	122,826,794.9	134,025,709.4	145,780,122.1	158,137,663.7	170,970,562.0	184,339,020.1
88																	
89	External Combustion (MI																
90	External Combustio	•	el Input (MM	Btu/yr) - Max	imum Ratio C	ase (avg + sto	l dev)										
91 92		Year											_				
92	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
93	Conservative Demand	5,662,527.3	7,544,905.6	10,128,115.7	13,443,634.8	17,530,272.6	22,490,016.7	27,643,277.2	32,783,093.1	37,912,884.6	43,061,891.0	48,295,515.9	54,096,267.3	60,384,247.0	67,163,211.0	74,414,983.8	82,135,764.7
94	Moderate Demand Ambitious Demand	12,196,396.3 47,772,346.6	15,546,479.3 56,118,337.9	19,797,210.9 65,318,849.8	24,974,389.2 75,481,897.7	31,189,909.4 86,684,549.9	38,494,680.8 98,922,528.7	46,245,875.5 111,647,943.0	54,287,381.6 125,490,014.7	62,480,460.4 139,334,889.3	70,906,290.3 153,681,618.5	79,670,813.7 168,718,124.9	89,295,304.7 184,101,249.2	99,508,301.9 200,247,420.5	110,339,964.5 217,222,065.6	121,776,718.4 234,849,673.1	133,799,974.0 253,212,939.7
96	Ambidions Dellique	47,772,340.0	30,110,337.9	05,510,045.0	/ 3,401,03/ . /	00,004,343.9	30,322,320.7	111,047,343.0	123,430,014./	139,334,003.3	133,001,010.5	100,710,124.9	104,101,243.2	200,247,420.3	217,222,000.0	234,043,073.1	233,212,333./
94 95 96 97	H2 Production Including F	uel (MMBtu/yr) =	= H2 Demand (MI	MBtu/yr) + Extern	al Combustion (I	MMBtu/yr)											
98	H2 Production Inclu																
99 100		Year															
100	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
101	Conservative Demand	20,702,589.5	27,584,694.5	37,029,088.3	49,150,854.4	64,091,883.7	82,225,049.6	101,065,724.7	119,857,245.2	138,612,116.4	157,437,238.3	176,571,731.1	197,779,677.5	220,768,964.5	245,553,323.3	272,066,303.9	300,294,010.7
101 102 103	Moderate Demand	44,590,864.6	56,838,998.8	72,379,966.2	91,308,086.3	114,032,456.1	140,739,203.1	169,078,104.8	198,478,404.6	228,432,864.8	259,238,279.2	291,281,980.1	326,469,781.7	363,809,202.5	403,410,507.0	445,224,066.7	489,181,916.7
103	Ambitious Demand	174,658,988.1	205,172,507.0	238,810,212.0	275,967,014.8	316,924,682.5	361,667,575.5	408,192,566.5	458,800,133.6	509,417,948.0	561,870,577.8	616,845,080.4	673,086,842.0	732,118,355.8	794,178,826.9	858,626,573.7	925,763,940.7

B C	1	ı	к	1 1	М	N	0	Р	Q I	R	S	т	u I	v	w	Х
	<u> </u>	<u> </u>	<u>L</u>					<u> </u>		<u> </u>	L	<u> </u>	L	<u></u>		
H2 Production Inc Fuel (M	IT/vr) = H2 Produ	ction Inc Fuel (M	MR+u/vr) * 1 000	000 Rtu/MMRtu	* (1 /60920 Rtu/l	h)*(1/2204 6 lh/	MT)									
H2 Production Includ						b) (1/2204.0 lb)										
	Year	, , , ,		(8	-,											
Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	204
Conservative Demand	154,147.0	205,389.6	275,710.5	365,966.5	477,214.2	612,229.8	752,513.3	892,430.9	1,032,075.6	1,172,243.3	1,314,714.6	1,472,624.3	1,643,797.5	1,828,336.5	2,025,746.3	2,23
Moderate Demand	332,013.8	423,210.8	538,925.4	679,860.1	849,060.8	1,047,913.4	1,258,918.7	1,477,826.9	1,700,861.3	1,930,231.6	2,168,822.1	2,430,822.7	2,708,843.9	3,003,706.6	3,315,041.2	3,64
Ambitious Demand	1,300,472.7	1,527,669.7	1,778,128.7	2,054,790.2	2,359,752.0	2,692,897.8	3,039,312.8	3,416,125.7	3,793,014.9	4,183,565.7	4,592,893.8	5,011,657.7	5,451,193.5	5,913,282.2	6,393,146.1	6,89
12 Production Including F																
H2 Production Includ		yr) - Maximuı	m Ratio Case	(avg + std dev	[,])											
	Year															
Scenario	2030	2031	2032	2033	2034	2035	2036 752,513,328.9	2037	2038	2039	2040	2041	2042	2043	2044	204
Conservative Demand Moderate Demand							752,513,328.9 1,258,918,667.9 1									
	, ,						3,039,312,763.2 3									
,		.,527,565,76617	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,00_,001,001.1_	0,000,011,700.1	,,,	3,733,01 1,001.3	.,200,000,000.2	.,	3,011,007,71	5, 15 1, 15 0, 15 116 1	3,313,131,121,1	0,000,10,0,00	0,000,00
H2 Production Including F	uel (MMscf/day)	= H2 Production	Including Fuel (M	IT/yr) ÷ 365 (day:	s/yr) * 2204.6 (lb/	/MT) * (1/0.0052	09 lb/scf) * (1/1,0	00,000 scf/MMs	cf)							
H2 Production Includ	ding Fuel (MN	lscf/day) - Ma	aximum Ratio	Case (avg + s	td dev)											
١	Year															
Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	20
Conservative Demand	178.7	238.2	319.7	424.3	553.3	709.9	872.6	1,034.8	1,196.7	1,359.3	1,524.5	1,707.6	1,906.0	2,120.0	2,348.9	
Moderate Demand	385.0	490.7	624.9	788.3	984.5	1,215.1	1,459.8	1,713.6	1,972.2	2,238.2	2,514.8	2,818.6	3,141.0	3,482.9	3,843.9	
Ambitious Demand	1,507.9	1,771.4	2,061.8	2,382.6	2,736.2	3,122.5	3,524.2	3,961.1	4,398.1	4,851.0	5,325.6	5,811.2	6,320.8	6,856.6	7,413.1	
TOTAL Ext Combustion (M	MRtu/vr) = H2 D	emand (MMscf/r	1av) * 3 62 (MMR	ttu/hr\/(MMscf/c	lav) * 8760 (hr/vi	-1										
TOTAL Ext Combusti					iuy, 0,00 (iii,y)	,										
	Year	- Waxiiiaiii	natio case (a)	ig i sta acti												
Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	204
Conservative Demand	5,674,357.9	7,560,669.1	10,149,276.2	13,471,722.3	17,566,898.3	22,537,004.7	27,701,031.8	32,851,586.1	37,992,095.3	43,151,859.4	48,396,418.8	54,209,289.5	60,510,406.7	67,303,533.8	74,570,457.6	82,30
Moderate Demand	12,221,878.0	15,578,960.3	19,838,572.9	25,026,567.7	31,255,073.9	38,575,107.0	46,342,496.1	54,400,803.1	62,610,999.6	71,054,433.5	79,837,268.4	89,481,867.7	99,716,202.6	110,570,495.7	122,031,144.2	134,07
Ambitious Demand	47,872,156.4	56,235,584.9	65,455,319.2	75,639,600.6	86,865,658.3	99,129,205.6	111,881,206.9	125,752,198.6	139,625,999.0	154,002,702.5	169,070,624.4	184,485,888.4	200,665,793.5	217,675,903.4	235,340,340.0	253,74
TOTAL Ext Combustion (M	1MBtu/vr) = H2 D	emand (MMscf/c	day) * 2.97 (MMB	tu/hr)/(MMscf/c	lay) * 8760 (hr/yr	·)										
TOTAL Fyt Combusti			• • • • • • • • • • • • • • • • • • • •													
TOTAL EXT COMBUST	on MMBtu/y		• • • • • • • • • • • • • • • • • • • •													
Υ	on MMBtu/yı Year	r - Average Ra	atio Case (avg)													
Y Scenario	on MMBtu/yı Year 2030	- Average Ra	atio Case (avg)	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	
Y Scenario Conservative Demand	on MMBtu/yr Year 2030 4,654,090.2	2031 6,201,236.6	2032 8,324,403.8	2033 11,049,463.5	14,408,313.7	18,484,779.1	22,720,297.6	26,944,765.7	31,160,994.9	35,393,016.9	39,694,587.7	44,462,285.7	49,630,441.8	55,202,142.8	61,162,450.4	67,50
Scenario Conservative Demand Moderate Demand	on MMBtu/yr Year 2030 4,654,090.2 10,024,345.2	2031 6,201,236.6 12,777,813.3	2032 8,324,403.8 16,271,533.9	2033 11,049,463.5 20,526,710.7	14,408,313.7 25,635,311.5	18,484,779.1 31,639,179.2	22,720,297.6 38,009,966.9	26,944,765.7 44,619,364.5	31,160,994.9 51,353,341.3	35,393,016.9 58,278,618.8	39,694,587.7 65,482,271.8	44,462,285.7 73,392,741.2	49,630,441.8 81,786,910.0	55,202,142.8 90,689,566.4	61,162,450.4 100,089,553.6	67,50 109,97
Y Scenario Conservative Demand	on MMBtu/yr Year 2030 4,654,090.2	2031 6,201,236.6	2032 8,324,403.8	2033 11,049,463.5	14,408,313.7	18,484,779.1	22,720,297.6 38,009,966.9	26,944,765.7 44,619,364.5	31,160,994.9	35,393,016.9 58,278,618.8	39,694,587.7	44,462,285.7	49,630,441.8	55,202,142.8	61,162,450.4	67,50 109,97
Scenario Conservative Demand Moderate Demand Ambitious Demand	year 2030 4,654,090.2 10,024,345.2 39,264,589.4	2031 6,201,236.6 12,777,813.3 46,124,246.6	2032 8,324,403.8 16,271,533.9 53,686,243.2	2033 11,049,463.5 20,526,710.7 62,039,358.1	14,408,313.7 25,635,311.5 71,246,934.7	18,484,779.1 31,639,179.2 81,305,457.0	22,720,297.6 38,009,966.9	26,944,765.7 44,619,364.5	31,160,994.9 51,353,341.3	35,393,016.9 58,278,618.8	39,694,587.7 65,482,271.8	44,462,285.7 73,392,741.2	49,630,441.8 81,786,910.0	55,202,142.8 90,689,566.4	61,162,450.4 100,089,553.6	67,50 109,97
Scenario Conservative Demand Moderate Demand Ambitious Demand TOTAL Ext Combustion (M	on MMBtu/yr Year 2030 4,654,090.2 10,024,345.2 39,264,589.4 1MBtu/yr) = H2 D	2031 6,201,236.6 12,777,813.3 46,124,246.6 emand (MMscf/d	2032 8,324,403.8 16,271,533.9 53,686,243.2 day) * 2.32 (MMB	2033 11,049,463.5 20,526,710.7 62,039,358.1 stu/hr)/(MMscf/o	14,408,313.7 25,635,311.5 71,246,934.7	18,484,779.1 31,639,179.2 81,305,457.0	22,720,297.6 38,009,966.9	26,944,765.7 44,619,364.5	31,160,994.9 51,353,341.3	35,393,016.9 58,278,618.8	39,694,587.7 65,482,271.8	44,462,285.7 73,392,741.2	49,630,441.8 81,786,910.0	55,202,142.8 90,689,566.4	61,162,450.4 100,089,553.6	67,50 109,97
Scenario Conservative Demand Moderate Demand Ambitious Demand TOTAL Ext Combustion (M	on MMBtu/yr Year 2030 4,654,090.2 10,024,345.2 39,264,589.4 1MBtu/yr) = H2 D on MMBtu/yr	2031 6,201,236.6 12,777,813.3 46,124,246.6 emand (MMscf/d	2032 8,324,403.8 16,271,533.9 53,686,243.2 day) * 2.32 (MMB	2033 11,049,463.5 20,526,710.7 62,039,358.1 stu/hr)/(MMscf/o	14,408,313.7 25,635,311.5 71,246,934.7	18,484,779.1 31,639,179.2 81,305,457.0	22,720,297.6 38,009,966.9	26,944,765.7 44,619,364.5	31,160,994.9 51,353,341.3	35,393,016.9 58,278,618.8	39,694,587.7 65,482,271.8	44,462,285.7 73,392,741.2	49,630,441.8 81,786,910.0	55,202,142.8 90,689,566.4	61,162,450.4 100,089,553.6	67,50 109,97
Scenario Conservative Demand Moderate Demand Ambitious Demand TOTAL Ext Combustion (M	year 2030 4,654,090.2 10,024,345.2 39,264,589.4 MBtu/yr) = H2 D on MMBtu/yr	2031 6,201,236.6 12,777,813.3 46,124,246.6 emand (MMscf/o	2032 8,324,403.8 16,271,533.9 53,686,243.2 day) * 2.32 (MMB Ratio Case (av	2033 11,049,463.5 20,526,710.7 62,039,358.1 stu/hr)/(MMscf/o	14,408,313.7 25,635,311.5 71,246,934.7 lay) * 8760 (hr/yr	18,484,779.1 31,639,179.2 81,305,457.0	22,720,297.6 38,009,966.9 91,764,607.6	26,944,765.7 44,619,364.5 103,141,550.5	31,160,994.9 51,353,341.3 114,520,797.1	35,393,016.9 58,278,618.8 126,312,523.4	39,694,587.7 65,482,271.8 138,671,184.6	44,462,285.7 73,392,741.2 151,314,734.8	49,630,441.8 81,786,910.0 164,585,441.2	55,202,142.8 90,689,566.4 178,537,078.8	61,162,450.4 100,089,553.6 193,025,393.1	67,50 109,97 208,11
Scenario Conservative Demand Moderate Demand Ambitious Demand TOTAL Ext Combustion (M	on MMBtu/yr Year 2030 4,654,090.2 10,024,345.2 39,264,589.4 1MBtu/yr) = H2 D on MMBtu/yr	2031 6,201,236.6 12,777,813.3 46,124,246.6 emand (MMscf/d	2032 8,324,403.8 16,271,533.9 53,686,243.2 day) * 2.32 (MMB	2033 11,049,463.5 20,526,710.7 62,039,358.1 stu/hr)/(MMscf/o	14,408,313.7 25,635,311.5 71,246,934.7	18,484,779.1 31,639,179.2 81,305,457.0	22,720,297.6 38,009,966.9	26,944,765.7 44,619,364.5 103,141,550.5	31,160,994.9 51,353,341.3	35,393,016.9 58,278,618.8	39,694,587.7 65,482,271.8	44,462,285.7 73,392,741.2 151,314,734.8	49,630,441.8 81,786,910.0 164,585,441.2	55,202,142.8 90,689,566.4	61,162,450.4 100,089,553.6 193,025,393.1	67,503 109,97 208,113 204
Scenario Conservative Demand Moderate Demand Ambitious Demand TOTAL Ext Combustion (M TOTAL Ext Combusti	year 2030 4,654,090.2 10,024,345.2 39,264,589.4 1MBtu/yr) = H2 D on MMBtu/yr Year 2030	2031 6,201,236.6 12,777,813.3 46,124,246.6 emand (MMscf/or - Minimum I	2032 8,324,403.8 16,271,533.9 53,686,243.2 day) * 2.32 (MMB Ratio Case (av	2033 11,049,463.5 20,526,710.7 62,039,358.1 stu/hr)/(MMscf/org - std dev)	14,408,313.7 25,635,311.5 71,246,934.7 day) * 8760 (hr/yr	18,484,779.1 31,639,179.2 81,305,457.0	22,720,297.6 38,009,966.9 91,764,607.6	26,944,765.7 44,619,364.5 103,141,550.5	31,160,994.9 51,353,341.3 114,520,797.1	35,393,016.9 58,278,618.8 126,312,523.4	39,694,587.7 65,482,271.8 138,671,184.6	44,462,285.7 73,392,741.2 151,314,734.8	49,630,441.8 81,786,910.0 164,585,441.2	55,202,142.8 90,689,566.4 178,537,078.8	61,162,450.4 100,089,553.6 193,025,393.1	204 67,503 109,973 208,113 204 52,703 85,863
Scenario Conservative Demand Moderate Demand Ambitious Demand TOTAL Ext Combustion (M TOTAL Ext Combustion Y Scenario Conservative Demand	year 2030 4,654,090.2 10,024,345.2 39,264,589.4 1MBtu/yr) = H2 D on MMBtu/yr Year 2030 3,633,822.4	2031 6,201,236.6 12,777,813.3 46,124,246.6 emand (MMscf/or - Minimum I 2031 4,841,804.0	2032 8,324,403.8 16,271,533.9 53,686,243.2 day) * 2.32 (MMB Ratio Case (av 2032 6,499,531.4	2033 11,049,463.5 20,526,710.7 62,039,358.1 stu/hr)/(MMscf/o g - std dev) 2033 8,627,204.7	14,408,313.7 25,635,311.5 71,246,934.7 lay) * 8760 (hr/yr 2034 11,249,729.1	18,484,779.1 31,639,179.2 81,305,457.0 2035 14,432,553.4	22,720,297.6 38,009,966.9 91,764,607.6 2036 17,739,563.3	26,944,765.7 44,619,364.5 103,141,550.5 2037 21,037,945.3	31,160,994.9 51,353,341.3 114,520,797.1 2038 24,329,894.5	35,393,016.9 58,278,618.8 126,312,523.4 2039 27,634,174.3 45,502,804.1	39,694,587.7 65,482,271.8 138,671,184.6 2040 30,992,756.6	44,462,285.7 73,392,741.2 151,314,734.8 2041 34,715,281.8	49,630,441.8 81,786,910.0 164,585,441.2 2042 38,750,476.8	55,202,142.8 90,689,566.4 178,537,078.8 2043 43,100,751.9	61,162,450.4 100,089,553.6 193,025,393.1 2044 47,754,443.3	67,503 109,973 208,113 204 52,709

<i>A</i>	A В С	ı	J	K	L	М	N	0	Р	Q	R	S	Т	U	V	W	Х
204	External Combustion (inc f	uel) N2O Emissi	ons (MT/yr) = H2	Production Includ	ing Fuel (MMBtu	ı/yr) * N2O EF (lb	/MMBtu) * (1/22	204.6 lb/MT)	•	•	•				•	•	
205	External Combustion	(inc fuel) N2	O Emissions (MT/yr) - Maxir	num Ratio Ca	ase (avg + std	dev)										
206 207	Y	ear															
207	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
208	Conservative Demand	4.1	5.5	7.3	9.7	12.7	16.3	20.0	23.8	27.5	31.2	35.0	39.2	43.7	48.7	53.9	59.5
209	Moderate Demand	8.8	11.3	14.3	18.1	22.6	27.9	33.5	39.3	45.3	51.4	57.7	64.7	72.1	79.9	88.2	96.9
210	Ambitious Demand	34.6	40.7	47.3	54.7	62.8	71.7	80.9	90.9	100.9	111.3	122.2	133.4	145.1	157.4	170.1	183.4
211																	
212	External Combustion (inc f	uel) N2O Emissi	ons (MT/yr) = H2	Production Includ	ing Fuel (MMBtu	ı/yr) * N2O EF (lb	/MMBtu) * (1/22	204.6 lb/MT)									
213	External Combustion	(inc fuel) N2	O Emissions (MT/yr) - Avera	ge Ratio Case	e (avg)											
214	Y	ear															
215	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
216	Conservative Demand	3.4	4.5	6.0	8.0	10.4	13.4	16.4	19.5	22.5	25.6	28.7	32.1	35.9	39.9	44.2	48.8
217	Moderate Demand	7.2	9.2	11.8	14.8	18.5	22.9	27.5	32.3	37.1	42.1	47.3	53.1	59.1	65.6	72.4	79.5
218 219	Ambitious Demand	28.4	33.3	38.8	44.9	51.5	58.8	66.3	74.6	82.8	91.3	100.3	109.4	119.0	129.1	139.5	150.5
219																	
220	External Combustion (inc f							204.6 lb/MT)									
221	External Combustion	(inc fuel) N2	O Emissions (MT/yr) - Minin	num Ratio Ca	ise (avg - std	dev)										
222	Υ	ear															
223	Scenario	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
224	Conservative Demand	2.6	3.5	4.7	6.2	8.1	10.4	12.8	15.2	17.6	20.0	22.4	25.1	28.0	31.2	34.5	38.1
225	Moderate Demand	5.7	7.2	9.2	11.6	14.5	17.9	21.5	25.2	29.0	32.9	37.0	41.4	46.2	51.2	56.5	62.1

Appendix C.6: Storage and Transmission

GHG Results, Calculations, and Data

	A	С	D	E	F
1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This	-	
		-	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	•			
١.		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	Favingment ID	Fuel Tune	Daniero atau	Volus	Deference
6 52	Equipment ID 1-S&T_Low (Long-Turbine-UG)		Parameter Hydrogen (MMBtu/)	Value	Reference ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY49
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY50 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY50
54	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY51
55	1-S&T_Low (Long-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY52
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY53
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY54
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY56
	1-S&T Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY57
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY58
62	1-S&T_Low (Long-Turbine-UG)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY59
63	1-S&T_Low (Long-Turbine-UG)	2031_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY60
64	1-S&T_Low (Long-Turbine-UG)	2031_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY61
65	1-S&T_Low (Long-Turbine-UG)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY62
66	1-S&T_Low (Long-Turbine-UG)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY63
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY65
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY66
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY67
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY68
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY69
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY70
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY71
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY72
$\overline{}$	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY74
78 79	1-S&T_Low (Long-Turbine-UG) 1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY75 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY76
	1-S&T Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY77 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY77
81	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY78 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY78
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY79 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY79
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY80
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY81
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY83
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY84
88	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY85
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY86
90	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY87
91	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY88
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY89

	A	С	D	E	F			
1								
2	Tab Contents							
	This workbook contains select tabs	(including th	is one) from a proprietary Stantec calculation tool. This $\mathfrak c$	data is copied				
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	orocessed				
3	through the function in "3.1 EQ S&T	<u> </u>						
	In this workbook, the terms "Low", "Mid", and "High" correspond to the "Conservative", "Moderate", and "Ambitious"							
4	market scenarios.							
5		_						
6	Equipment ID		Parameter	Value	Reference			
93	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY90			
95	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY92			
96 97	1-S&T_Low (Long-Turbine-UG) 1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY93			
98	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY94 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY95			
99	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY96 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY96			
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY97 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY97			
	1-S&T_Low (Long-Turbine-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY98			
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY99			
	1-S&T Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY101			
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY102			
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY103			
	1-S&T_Low (Long-Turbine-UG)	2036_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY104			
108	1-S&T_Low (Long-Turbine-UG)	2036_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY105			
109	1-S&T_Low (Long-Turbine-UG)	2036_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY106			
110	1-S&T_Low (Long-Turbine-UG)	2036_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY107			
111	1-S&T_Low (Long-Turbine-UG)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY108			
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY110			
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY111			
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY112			
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY113			
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY114			
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY115			
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY116			
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY117			
	1-S&T_Low (Long-Turbine-UG) 1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY119			
—	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY120 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY121			
\vdash	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY122			
—	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY123			
-	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY124			
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY125			
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY126			
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY128			
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY129			
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY130			
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY131			

	A	С	D	Е	F
1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This	-	
			"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	•			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	E. C. C. L. D.				
6	Equipment ID		Parameter (A41/In)	Value	Reference
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY132
	1-S&T_Low (Long-Turbine-UG) 1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY133 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY134
	1-S&T Low (Long-Turbine-UG)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY135
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY137
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY138
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY139
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY140
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY141
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY142
	1-S&T_Low (Long-Turbine-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY143
147	1-S&T_Low (Long-Turbine-UG)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY144
149	1-S&T_Low (Long-Turbine-UG)	2040_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY146
150	1-S&T_Low (Long-Turbine-UG)	2040_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY147
151	1-S&T_Low (Long-Turbine-UG)	2041_H2	Hydrogen (MMBtu/)	143683410.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY148
152	1-S&T_Low (Long-Turbine-UG)	2041_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY149
153	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY150
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY151
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY152
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY153
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY155
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY156
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY157
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY158
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY159
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY160
	1-S&T_Low (Long-Turbine-UG) 1-S&T Low (Long-Turbine-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY161
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY162
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY164 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY165
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY166
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY167
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY168
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY169
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY170
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY171
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY173
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1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This o	-	
			"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T"	<u> </u>			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	E. C. C. L. D.			N. I.	
6	Equipment ID		Parameter	Value	Reference
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY174
	1-S&T_Low (Long-Turbine-UG) 1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY175 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY176
	1-S&T Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY177 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY177
	1-S&T_Low (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY178
	1-S&T_Low (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY179 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY179
	1-S&T_Low (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY180
	1-S&T_Low (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY182
	1-S&T_Low (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY183
	1-S&T_Low (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY184
	1-S&T_Low (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY185
	1-S&T_Low (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY186
190	1-S&T_Low (Long-Turbine-UG)	2045_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY187
191	1-S&T_Low (Long-Turbine-UG)	2045_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY188
192	1-S&T_Low (Long-Turbine-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY189
194	1-S&T_Low (Long-Turbine-UG)	2045_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY191
195	1-S&T_Low (Long-Turbine-UG)	2045_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY192
	2-S&T_Low (Long-Turbine-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY238
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY239
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY240
_	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY241
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY242
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY243
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY245
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY246
	2-S&T_Low (Long-Turbine-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY247
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY248
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY249 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY250
	2-S&T_Low (Long-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY251
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY251 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY252
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY254
	2-S&T_Low (Long-Turbine-Sphere)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY255
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY256
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY257
	2-S&T_Low (Long-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY258
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY259
	1 - 22 (20.0 . 0.0110 0011010)		- 5 1 1	52.5	

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1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This	•	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"		e the results in "4. Calculations". High" correspond to the "Conservative", "Moderate", ar	ad "Ambitique"	
4	market scenarios.	iviiu , aiiu i	rigii correspond to the Conservative , ivioderate , ai	id Ambitious	
5	market sechanos.				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
263	2-S&T_Low (Long-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY260
264	2-S&T_Low (Long-Turbine-Sphere)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY261
266	2-S&T_Low (Long-Turbine-Sphere)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY263
267	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY264
	2-S&T_Low (Long-Turbine-Sphere)		Hydrogen (MMBtu/)	35707219.61	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY265
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY266
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY267
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY268
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY269
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY270
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY272 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY273
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY274
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY275
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY276
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY277
281	2-S&T_Low (Long-Turbine-Sphere)	2034_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY278
282	2-S&T_Low (Long-Turbine-Sphere)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY279
284	2-S&T_Low (Long-Turbine-Sphere)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY281
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY282
_	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY283
287	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY284
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY285
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY286 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY287
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY288
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY290
	2-S&T Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY291
-	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY292
	2-S&T_Low (Long-Turbine-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY293
	2-S&T_Low (Long-Turbine-Sphere)	2036_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY294
298	2-S&T_Low (Long-Turbine-Sphere)	2036_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY295
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY296
300	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY297
302	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY299
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY300
304	2-S&T_Low (Long-Turbine-Sphere)	2037_H2	Hydrogen (MMBtu/)	87074152.21	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY301

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1		_			
2	Tab Contents				
	I -	_	s one) from a proprietary Stantec calculation tool. This o		
			"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T"	•			
		Mid", and "I	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	E. Constant				
6	Equipment ID		Parameter	Value	Reference
$\overline{}$	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY302
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY303 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY304
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY305
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY306
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY308
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY309
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY310
	2-S&T Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY311
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY312
	2-S&T_Low (Long-Turbine-Sphere)	2038_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY313
317	2-S&T_Low (Long-Turbine-Sphere)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY314
318	2-S&T_Low (Long-Turbine-Sphere)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY315
320	2-S&T_Low (Long-Turbine-Sphere)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY317
321	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY318
	2-S&T_Low (Long-Turbine-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY319
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY320
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY321
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY322
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY323
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY324
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY326
$\overline{}$	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY327
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY328
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY329 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY330
$\overline{}$	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY331 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY331
	2-S&T Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY332
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY333
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY335
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY336
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY337
	2-S&T_Low (Long-Turbine-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY338
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY339
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY340
344	2-S&T_Low (Long-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY341
345	2-S&T_Low (Long-Turbine-Sphere)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY342

	А	С	D	E	F
1		_			
2	Tab Contents				1
			is one) from a proprietary Stantec calculation tool. This		
			"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"			l A - :+:	
4	market scenarios.	viia", and	High" correspond to the "Conservative", "Moderate", ar	nd Ambitious	
5	market scenarios.				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	2-S&T_Low (Long-Turbine-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY344
348	2-S&T_Low (Long-Turbine-Sphere)	2041_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY345
349	2-S&T_Low (Long-Turbine-Sphere)	2042_H2	Hydrogen (MMBtu/)	160384717.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY346
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY347
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY348
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY349
_	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY350
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY351 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY353
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY354
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY355
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY356
360	2-S&T_Low (Long-Turbine-Sphere)	2043_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY357
361	2-S&T_Low (Long-Turbine-Sphere)	2043_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY358
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY359
	2-S&T_Low (Long-Turbine-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY360
	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY362
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY363 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY364
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY365
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY366
	2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY367
	2-S&T_Low (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY368
	2-S&T_Low (Long-Turbine-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY369
374	2-S&T_Low (Long-Turbine-Sphere)	2044_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY371
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY372
	2-S&T_Low (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY373
	2-S&T_Low (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY374
	2-S&T_Low (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY375
	2-S&T_Low (Long-Turbine-Sphere) 2-S&T_Low (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY376
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY377 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY378
_	2-S&T_Low (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY380
	2-S&T_Low (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY381
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY427
431	3-S&T_Low (Long-Recip-UG)	2030_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY428
432	3-S&T_Low (Long-Recip-UG)	2030_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY429

the function in "3.1 EQ S&T" to	_	s ana) from a proprietary Stantos calculation tool. This d		
rkbook contains select tabs (inc LP1_GHG_S&T_1_DataPrep_So the function in "3.1 EQ S&T" to	_	s one) from a proprietary Stantos calculation tool. This d		
LP1_GHG_S&T_1_DataPrep_So the function in "3.1 EQ S&T" to	_	cone) from a proprietary Stanted calculation tool. This d		
the function in "3.1 EQ S&T" to	CalGas". "	s one, from a proprietary stanted calculation tool. This o	data is copied	
	,	1. Data_Prep_S&T" tab. The input data in this tab was μ	orocessed	
vorkhook the terms "Low" "Mi	•			
	id", and "F	ligh" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
scenarios.				
				Reference
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY430
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY431
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY432
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY434
	_	***		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY435 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY436
				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY437
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY438
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY439
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY440
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY441
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY443
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY444
		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY445
Low (Long-Recip-UG)	2032_H2	% H2 Stored (scf/100-scf)	13.82827017 A	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY446
Low (Long-Recip-UG)	2032_H2	Compression Energy (MJ/kg)	14 A	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY447
Low (Long-Recip-UG)	2032_H2	Efficiency (MMBtu/100-MMBtu)	60.3 A	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY448
	_		450 A	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY449
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY450
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY452
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY453
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY454
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY455
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY456
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY457
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY458
	_	,		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY459 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY461
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY461 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY462
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY463
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY464
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY465
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY466
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY467
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY468
	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY470
	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY471
	ent ID Low (Long-Recip-UG)	Fuel Type	Fuel Type	Fuel Type

	A	С	D	E	F
1					
2	Tab Contents				
	This workbook contains select tabs (including th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was $\mbox{\ifmmode \mu$}$	orocessed	
3	through the function in "3.1 EQ S&T'	•			
		Mid", and "	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
-	3-S&T_Low (Long-Recip-UG)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY472
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY473
	3-S&T_Low (Long-Recip-UG) 3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY474
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY475 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY476
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY477 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY477
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY479 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY479
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY480
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY481
	3-S&T Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY482
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY483
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY484
488	3-S&T_Low (Long-Recip-UG)	2036_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY485
489	3-S&T_Low (Long-Recip-UG)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY486
491	3-S&T_Low (Long-Recip-UG)	2036_H2	O2 Percent (scf/100-scf)	15 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY488
492	3-S&T_Low (Long-Recip-UG)	2036_H2	H2 N2O EF (ppm/)	2 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY489
493	3-S&T_Low (Long-Recip-UG)	2037_H2	Hydrogen (MMBtu/)	87074152.21	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY490
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY491
	3-S&T_Low (Long-Recip-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY492
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY493
	3-S&T_Low (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY494
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY495
-	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY497
-	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY498
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY499
	3-S&T_Low (Long-Recip-UG) 3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY500 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY501
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY501 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY502
	3-S&T_Low (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY503
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY504
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY506
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY507
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY508
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY509
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY510
	3-S&T_Low (Long-Recip-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY511
	3-S&T_Low (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY512

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1					
2	Tab Contents				
	This workbook contains select tabs (i	including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T'	' to produce	e the results in "4. Calculations".		
	In this workbook, the terms "Low", "	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY513
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY515
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY516
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY517
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY518
	3-S&T_Low (Long-Recip-UG) 3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY519 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY520
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY521 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY521
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY522
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY524
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY525
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY526
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY527
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY528
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY529
533	3-S&T_Low (Long-Recip-UG)	2041_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY530
534	3-S&T_Low (Long-Recip-UG)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY531
536	3-S&T_Low (Long-Recip-UG)	2041_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY533
537	3-S&T_Low (Long-Recip-UG)	2041_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY534
	3-S&T_Low (Long-Recip-UG)	2042_H2	Hydrogen (MMBtu/)	160384717.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY535
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY536
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY537
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY538
	3-S&T_Low (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY539
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY540
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY542
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY543
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY544
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY545
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY546
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY547
	3-S&T_Low (Long-Recip-UG) 3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY548
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY549 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY551
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY551 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY552
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY553 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY553
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY554
JJ/	13-301_row (roll8-verib-og)	ZU44_HZ	/0 112 JUIEU (301/ 100-301)	13.0202/01/	ALI I_OHO_3&1_I_DataFlep_30CalOas.xisx, I. Data_Flep_3&1, Cell A1334

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1					
2	Tab Contents				
	This workbook contains select tabs ((including th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", '	'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY555
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY556
	3-S&T_Low (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY557
	3-S&T_Low (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY558
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY560
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY561
	3-S&T_Low (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY562
	3-S&T_Low (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY563
	3-S&T_Low (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY564
	3-S&T_Low (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY565
	3-S&T_Low (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY566
	3-S&T_Low (Long-Recip-UG)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY567
	3-S&T_Low (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY569
	3-S&T_Low (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY570
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY616
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY617
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY618
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY619
	4-S&T_Low (Long-Recip-Sphere) 4-S&T_Low (Long-Recip-Sphere)		Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY620 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY621
	4-S&T_Low (Long-Recip-Sphere)	_	•		
_	1	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY623 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY624
	4-S&T_Low (Long-Recip-Sphere) 4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY625
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY626 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY626
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY627
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY628
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY629
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY630
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY632
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY633
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY634
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY635
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY636
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY637
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY638
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY639
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY641
U++	1 . 201 LOW (LONG NECED SPINETE)	2032_112	02 1 creciit (301/ 100 301/		7.E. 1_0.10_3&1_1_5ata11ep_30ca10a3.xi3x, 1. bata_11ep_3&1, cell A1041

	A	С	D	E	F
1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This o	-	
			"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	orocessed	
3	through the function in "3.1 EQ S&T"	<u> </u>			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY642
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY643
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY644 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY645
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY646 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY646
	4-S&T_Low (Long-Recip-Sphere) 4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY647 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY647
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY648 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY648
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY650
	4-S&T Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY651
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY652
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY653
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY654
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY655
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY656
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY657
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY659
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY660
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY661
	4-S&T_Low (Long-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY662
	4-S&T_Low (Long-Recip-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY663
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY664
668	4-S&T_Low (Long-Recip-Sphere)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY665
669	4-S&T_Low (Long-Recip-Sphere)	2035_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY666
671	4-S&T_Low (Long-Recip-Sphere)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY668
672	4-S&T_Low (Long-Recip-Sphere)	2035_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY669
673	4-S&T_Low (Long-Recip-Sphere)	2036_H2	Hydrogen (MMBtu/)	73422447.54	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY670
674	4-S&T_Low (Long-Recip-Sphere)	2036_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY671
675	4-S&T_Low (Long-Recip-Sphere)	2036_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY672
676	4-S&T_Low (Long-Recip-Sphere)	2036_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY673
677	4-S&T_Low (Long-Recip-Sphere)	2036_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY674
678	4-S&T_Low (Long-Recip-Sphere)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY675
	4-S&T_Low (Long-Recip-Sphere)		O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY677
	4-S&T_Low (Long-Recip-Sphere)	2036_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY678
682	4-S&T_Low (Long-Recip-Sphere)	2037_H2	Hydrogen (MMBtu/)	87074152.21	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY679
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY680
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY681
685	4-S&T_Low (Long-Recip-Sphere)	2037_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY682

	А	С	D	Е	F
1					
2	Tab Contents				
	This workbook contains select tabs (including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	•			
		'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY683
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY684
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY686
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY687
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY688
	4-S&T_Low (Long-Recip-Sphere) 4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY689
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY690 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY691
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY692 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY692
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY693
	4-S&T_Low (Long-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY695
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY696
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY697
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY698
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY699
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY700
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY701
705	4-S&T_Low (Long-Recip-Sphere)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY702
707	4-S&T_Low (Long-Recip-Sphere)	2039_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY704
708	4-S&T_Low (Long-Recip-Sphere)	2039_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY705
709	4-S&T_Low (Long-Recip-Sphere)	2040_H2	Hydrogen (MMBtu/)	128276215.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY706
710	4-S&T_Low (Long-Recip-Sphere)	2040_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY707
711	4-S&T_Low (Long-Recip-Sphere)	2040_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY708
	4-S&T_Low (Long-Recip-Sphere)	2040_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY709
	4-S&T_Low (Long-Recip-Sphere)	2040_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY710
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY711
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY713
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY714
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY715
_	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY716
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY717
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY718
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY719
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY720
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY722
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY723
/2/	4-S&T_Low (Long-Recip-Sphere)	2042_H2	Hydrogen (MMBtu/)	160384/1/.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY724

	А	С	D	Е	F
1		_			
2	Tab Contents				
		_	s one) from a proprietary Stantec calculation tool. This o	-	
			"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T"	•			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	E. C. C. C. D.				
6	Equipment ID		Parameter	Value	Reference
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY725
	4-S&T_Low (Long-Recip-Sphere) 4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY726 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY727
	4-S&T Low (Long-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY728
	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY729
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY731
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY732
	4-S&T Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY733
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY734
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY735
	4-S&T_Low (Long-Recip-Sphere)	2043_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY736
740	4-S&T_Low (Long-Recip-Sphere)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY737
741	4-S&T_Low (Long-Recip-Sphere)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY738
743	4-S&T_Low (Long-Recip-Sphere)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY740
744	4-S&T_Low (Long-Recip-Sphere)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY741
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY742
	4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY743
	4-S&T_Low (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY744
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY745
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY746
—	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY747
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY749
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY750
	4-S&T_Low (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY751
	4-S&T_Low (Long-Recip-Sphere) 4-S&T_Low (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY752 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY753
	4-S&T_Low (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY754
	4-S&T_Low (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY755
-	4-S&T_Low (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY756
	4-S&T_Low (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY758
	4-S&T_Low (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY759
	5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY805
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY806
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY807
	5-S&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY808
812	5-S&T_Low (Short-Turbine-UG)	2030_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY809
813	5-S&T_Low (Short-Turbine-UG)	2030_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY810

1. Data_Prep_S&T, Cell AY812 1. Data_Prep_S&T, Cell AY813 1. Data_Prep_S&T, Cell AY814 1. Data_Prep_S&T, Cell AY815
1. Data_Prep_S&T, Cell AY813 1. Data_Prep_S&T, Cell AY814
1. Data_Prep_S&T, Cell AY813 1. Data_Prep_S&T, Cell AY814
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1. Data_riep_3&i, ceii Aio13
1. Data_Prep_S&T, Cell AY816
1. Data_Prep_S&T, Cell AY817
1. Data_Prep_S&T, Cell AY818
1. Data_Prep_S&T, Cell AY819
1. Data Prep S&T, Cell AY821
1. Data_Prep_S&T, Cell AY822
1. Data_Prep_S&T, Cell AY823
1. Data_Prep_S&T, Cell AY824
1. Data_Prep_S&T, Cell AY825
1. Data_Prep_S&T, Cell AY826
1. Data_Prep_S&T, Cell AY827
1. Data_Prep_S&T, Cell AY828
1. Data_Prep_S&T, Cell AY830
1. Data_Prep_S&T, Cell AY831
1. Data_Prep_S&T, Cell AY832
1. Data_Prep_S&T, Cell AY833
1. Data_Prep_S&T, Cell AY834
1. Data_Prep_S&T, Cell AY835
1. Data_Prep_S&T, Cell AY836
1. Data_Prep_S&T, Cell AY837
1. Data_Prep_S&T, Cell AY839 1. Data_Prep_S&T, Cell AY840
1. Data_Prep_S&T, Cell AY841
1. Data_Prep_S&T, Cell AY842
1. Data_Prep_S&T, Cell AY843
1. Data_Prep_S&T, Cell AY844
1. Data_Prep_S&T, Cell AY845
1. Data_Prep_S&T, Cell AY846
1. Data_Prep_S&T, Cell AY848
1. Data_Prep_S&T, Cell AY849
1. Data_Prep_S&T, Cell AY850
1. Data_Prep_S&T, Cell AY851
1. Data_Prep_S&T, Cell AY852

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1		_			
2	Tab Contents				
	<u> </u>	_	s one) from a proprietary Stantec calculation tool. This	·	
			"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter (AMARIA (AGGA AMARIA)	Value	Reference
	5-S&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY853
	5-S&T_Low (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY854
	5-S&T_Low (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY855
	5-S&T_Low (Short-Turbine-UG)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY857
-	5-S&T_Low (Short-Turbine-UG) 5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY858 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY859
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY860
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY861
	5-5&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY862
	5-5&T_Low (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY863
	5-S&T_Low (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY864
	5-S&T_Low (Short-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY866
	5-S&T_Low (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY867
	5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY868
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY869
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY870
	5-S&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY871
	5-S&T_Low (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY872
	5-S&T_Low (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY873
	5-S&T_Low (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY875
	5-S&T_Low (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY876
880	5-S&T_Low (Short-Turbine-UG)	2038_H2	Hydrogen (MMBtu/)	100699231.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY877
881	5-S&T_Low (Short-Turbine-UG)	2038_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY878
882	5-S&T_Low (Short-Turbine-UG)	2038_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY879
883	5-S&T_Low (Short-Turbine-UG)	2038_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY880
884	5-S&T_Low (Short-Turbine-UG)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY881
885	5-S&T_Low (Short-Turbine-UG)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY882
887	5-S&T_Low (Short-Turbine-UG)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY884
888	5-S&T_Low (Short-Turbine-UG)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY885
889	5-S&T_Low (Short-Turbine-UG)	2039_H2	Hydrogen (MMBtu/)	114375347.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY886
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY887
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY888
	5-S&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY889
	5-S&T_Low (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY890
	5-S&T_Low (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY891
	5-S&T_Low (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY893
897	5-S&T_Low (Short-Turbine-UG)	2039_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY894

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1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This o		
			"1. Data_Prep_S&T" tab. The input data in this tab was p	processed	
3	through the function in "3.1 EQ S&T"	•			
		Mid", and "	High" correspond to the "Conservative", "Moderate", an	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY895
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY896
	5-S&T_Low (Short-Turbine-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY897 ALP1 GHG S&T 1 DataPrep SoCalGas.xlsx, 1. Data Prep S&T, Cell AY898
	5-S&T_Low (Short-Turbine-UG) 5-S&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		
	5-S&T_Low (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY899
	5-S&T_Low (Short-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY900 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY902
	5-S&T_Low (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY903
	5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY904
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY905
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY906
	5-S&T_Low (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY907
	5-S&T_Low (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY908
	5-S&T_Low (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY909
	5-S&T_Low (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY911
	5-S&T_Low (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY912
	5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY913
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY914
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY915
	5-S&T_Low (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY916
920	5-S&T_Low (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY917
921	5-S&T_Low (Short-Turbine-UG)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY918
923	5-S&T_Low (Short-Turbine-UG)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY920
924	5-S&T_Low (Short-Turbine-UG)	2042_H2	H2 N2O EF (ppm/)	2 .	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY921
925	5-S&T_Low (Short-Turbine-UG)	2043_H2	Hydrogen (MMBtu/)	178390112.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY922
926	5-S&T_Low (Short-Turbine-UG)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY923
927	5-S&T_Low (Short-Turbine-UG)	2043_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY924
928	5-S&T_Low (Short-Turbine-UG)	2043_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY925
929	5-S&T_Low (Short-Turbine-UG)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY926
930	5-S&T_Low (Short-Turbine-UG)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY927
932	5-S&T_Low (Short-Turbine-UG)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY929
	5-S&T_Low (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY930
	5-S&T_Low (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY931
	5-S&T_Low (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY932
	5-S&T_Low (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY933
	5-S&T_Low (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY934
938	5-S&T_Low (Short-Turbine-UG)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY935

	A	С	D	E	F
1					
2	Tab Contents				
	This workbook contains select tabs (i	ncluding th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ا	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
939	5-S&T_Low (Short-Turbine-UG)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY936
941	5-S&T_Low (Short-Turbine-UG)	2044_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY938
942	5-S&T_Low (Short-Turbine-UG)	2044_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY939
943	5-S&T_Low (Short-Turbine-UG)	2045_H2	Hydrogen (MMBtu/)	218158245.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY940
944	5-S&T_Low (Short-Turbine-UG)	2045_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY941
945	5-S&T_Low (Short-Turbine-UG)	2045_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY942
946	5-S&T_Low (Short-Turbine-UG)	2045_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY943
947	5-S&T_Low (Short-Turbine-UG)	2045_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY944
948	5-S&T_Low (Short-Turbine-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY945
950	5-S&T_Low (Short-Turbine-UG)	2045_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY947
951	5-S&T_Low (Short-Turbine-UG)	2045_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY948
997	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	Hydrogen (MMBtu/)	15040062.24	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY994
998	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY995
999	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY996
1000	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY997
1001	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY998
1002	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY999
1004	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1001
1005	6-S&T_Low (Short-Turbine-Sphere)	2030_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1002
1006	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	Hydrogen (MMBtu/)	20039788.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1003
1007	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1004
1008	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1005
1009	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1006
1010	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1007
1011	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1008
1013	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1010
1014	6-S&T_Low (Short-Turbine-Sphere)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1011
1015	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	Hydrogen (MMBtu/)	26900972.64	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1012
1016	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1013
1017	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1014
1018	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1015
1019	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1016
1020	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1017
1022	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1019
1023	6-S&T_Low (Short-Turbine-Sphere)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1020
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1021
1025	6-S&T_Low (Short-Turbine-Sphere)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1022

	A	С	D	E	F
1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding th	s one) from a proprietary Stantec calculation tool. This	data is copied	
			"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	E. Constant			N. 1	
6	Equipment ID		Parameter (MAI/III)	Value	Reference
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1023
	6-S&T_Low (Short-Turbine-Sphere) 6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1024 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1025
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1025 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1026
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1028 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1028
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1029 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1029
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1030
	6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1031
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1032
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1033
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1034
	6-S&T_Low (Short-Turbine-Sphere)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1035
1040	6-S&T_Low (Short-Turbine-Sphere)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1037
1041	6-S&T_Low (Short-Turbine-Sphere)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1038
1042	6-S&T_Low (Short-Turbine-Sphere)	2035_H2	Hydrogen (MMBtu/)	59735032.76	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1039
1043	6-S&T_Low (Short-Turbine-Sphere)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1040
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1041
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1042
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1043
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1044
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1046
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1047
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1048
	6-S&T_Low (Short-Turbine-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1049
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1050
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1051
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1052
	6-S&T_Low (Short-Turbine-Sphere) 6-S&T_Low (Short-Turbine-Sphere)	_	• • • • • • • • • • • • • • • • • • • •		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1053 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1055
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1056 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1056
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1057 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1057
	6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1058
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1059
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1060
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1061
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1062
	6-S&T_Low (Short-Turbine-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1064
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1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was $\mathfrak l$	orocessed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter (1)	Value	Reference
	6-S&T_Low (Short-Turbine-Sphere)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1065
-	6-S&T_Low (Short-Turbing Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1066
	6-S&T_Low (Short-Turbine-Sphere) 6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1067 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1068
-	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1069 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1069
	6-S&T_Low (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1070 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1070
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1071 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1071
	6-S&T Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1073
—	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1074
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1075
	6-S&T_Low (Short-Turbine-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1076
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1077
1081	6-S&T_Low (Short-Turbine-Sphere)	2039_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1078
1082	6-S&T_Low (Short-Turbine-Sphere)	2039_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1079
1083	6-S&T_Low (Short-Turbine-Sphere)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1080
1085	6-S&T_Low (Short-Turbine-Sphere)	2039_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1082
	6-S&T_Low (Short-Turbine-Sphere)	2039_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1083
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1084
	6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1085
	6-S&T_Low (Short-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1086
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1087
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1088
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1089
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1091
	6-S&T_Low (Short-Turbing Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1092
	6-S&T_Low (Short-Turbine-Sphere) 6-S&T_Low (Short-Turbine-Sphere)		Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1093
	6-S&T Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1094 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1095
	6-S&T Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1096 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1096
—	6-S&T_Low (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1097
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1098
\vdash	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1100
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1101
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1102
	6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1103
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1104
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1105

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1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	<u> </u>			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	6-S&T_Low (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1106
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1107
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1109
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1110
-	6-S&T_Low (Short-Turbine-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY1111
	6-S&T_Low (Short-Turbine-Sphere) 6-S&T Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1112 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1113
	<u> </u>	_	Compression Energy (MJ/kg)		
	6-S&T_Low (Short-Turbine-Sphere) 6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1114 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1115
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1116 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1116
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1118 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1118
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1119 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1119
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1120
	6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1121
	6-S&T_Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1122
	6-S&T_Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1123
	6-S&T_Low (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1124
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1125
	6-S&T_Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1127
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1128
	6-S&T_Low (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1129
	6-S&T_Low (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1130
	6-S&T Low (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1131
	6-S&T Low (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1132
	6-S&T_Low (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1133
	6-S&T_Low (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1134
	6-S&T Low (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1136
1140	6-S&T_Low (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1137
1186	7-S&T_Low (Short-Recip-UG)	2030_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1183
1187	7-S&T_Low (Short-Recip-UG)		% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1184
	7-S&T_Low (Short-Recip-UG)	2030_H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1185
	7-S&T_Low (Short-Recip-UG)	2030_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1186
1190	7-S&T_Low (Short-Recip-UG)	2030_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1187
1191	7-S&T_Low (Short-Recip-UG)	2030_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1188
1193	7-S&T_Low (Short-Recip-UG)	2030_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1190
1194	7-S&T_Low (Short-Recip-UG)	2030_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1191
1195	7-S&T_Low (Short-Recip-UG)	2031_H2	Hydrogen (MMBtu/)	20039788.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1192

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1		_			
2	Tab Contents				
	This workbook contains select tabs (ir	ncluding thi	s one) from a proprietary Stantec calculation tool. This c	lata is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas", '	"1. Data_Prep_S&T" tab. The input data in this tab was p	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "N	/lid", and "l	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1196	7-S&T_Low (Short-Recip-UG)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1193
1197	7-S&T_Low (Short-Recip-UG)	2031_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1194
1198	7-S&T_Low (Short-Recip-UG)	2031_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1195
1199	7-S&T_Low (Short-Recip-UG)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1196
1200	7-S&T_Low (Short-Recip-UG)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1197
1202	7-S&T_Low (Short-Recip-UG)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1199
1203	7-S&T_Low (Short-Recip-UG)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1200
1204	7-S&T_Low (Short-Recip-UG)	2032_H2	Hydrogen (MMBtu/)	26900972.64	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1201
1205	7-S&T_Low (Short-Recip-UG)	2032_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1202
1206	7-S&T_Low (Short-Recip-UG)	2032_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1203
1207	7-S&T_Low (Short-Recip-UG)	2032_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1204
1208	7-S&T_Low (Short-Recip-UG)	2032_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1205
1209	7-S&T_Low (Short-Recip-UG)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1206
1211	7-S&T_Low (Short-Recip-UG)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1208
1212	7-S&T_Low (Short-Recip-UG)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1209
1213	7-S&T_Low (Short-Recip-UG)	2033_H2	Hydrogen (MMBtu/)	35707219.61	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1210
1214	7-S&T_Low (Short-Recip-UG)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1211
1215	7-S&T_Low (Short-Recip-UG)	2033_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1212
1216	7-S&T_Low (Short-Recip-UG)	2033_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1213
1217	7-S&T_Low (Short-Recip-UG)	2033_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1214
1218	7-S&T_Low (Short-Recip-UG)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1215
1220	7-S&T_Low (Short-Recip-UG)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1217
	7-S&T_Low (Short-Recip-UG)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1218
1222	7-S&T_Low (Short-Recip-UG)	2034_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1219
1223	7-S&T_Low (Short-Recip-UG)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1220
1224	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1221
1225	7-S&T_Low (Short-Recip-UG)	2034 H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1222
1226	7-S&T_Low (Short-Recip-UG)	2034_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1223
1227	7-S&T_Low (Short-Recip-UG)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1224
1229	7-S&T_Low (Short-Recip-UG)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1226
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1227
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1228
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1229
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1230
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1231
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1232
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1233
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2	Tab Contents	7			
	This workbook contains select tabs (i	ncluding th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was p	•	
3	through the function in "3.1 EQ S&T"				
		•	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.	, , , , , , , , , , , ,	,		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	7-S&T_Low (Short-Recip-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1235
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1236
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1237
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1238
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1239
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1240
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1241
	7-S&T Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1242
	7-S&T_Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1244
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1245
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1246
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1247
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1248
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1249
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1250
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1251
	7-S&T_Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1253
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1254
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1255
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1256
1260	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1257
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1258
	7-S&T Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1 GHG S&T 1 DataPrep SoCalGas.xlsx, 1. Data Prep S&T, Cell AY1259
1263	7-S&T Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1260
1265	7-S&T_Low (Short-Recip-UG)	2038_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1262
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1263
1267	7-S&T_Low (Short-Recip-UG)	2039_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1264
1268	7-S&T_Low (Short-Recip-UG)	2039_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1265
1269	7-S&T_Low (Short-Recip-UG)	2039_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1266
1270	7-S&T_Low (Short-Recip-UG)	2039_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1267
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1268
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1269
	7-S&T_Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1271
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1272
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1273
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1274
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1275
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2	Tab Contents				
	This workbook contains select tabs	including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low",	'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
	Equipment ID		Parameter	Value	Reference
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1276
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1277
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1278
	7-S&T_Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1280
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1281
	7-S&T_Low (Short-Recip-UG) 7-S&T_Low (Short-Recip-UG)		Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1282 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1283
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1284 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1284
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1285 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1285
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1286
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1287
	7-S&T_Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1289
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1290
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1291
1295	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1292
1296	7-S&T_Low (Short-Recip-UG)	2042_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1293
1297	7-S&T_Low (Short-Recip-UG)	2042_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1294
1298	7-S&T_Low (Short-Recip-UG)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1295
1299	7-S&T_Low (Short-Recip-UG)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1296
	7-S&T_Low (Short-Recip-UG)	2042_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1298
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1299
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1300
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1301
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1302
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1303
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1304
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1305
	7-S&T_Low (Short-Recip-UG) 7-S&T Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1307
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1308 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1309
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1310 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1310
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1311 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1311
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1311 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1312
	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1313
	7-S&T_Low (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1314
	7-S&T_Low (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1316
	7-S&T_Low (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1317
1320	/-5&1_Low (Short-Recip-UG)	2044_H2	HZ NZO EF (ppm/)	2	ALP1_GHG_S&I_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1317

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2	Tab Contents				
	This workbook contains select tabs (i	ncluding thi	s one) from a proprietary Stantec calculation tool. This c	lata is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was p	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	7-S&T_Low (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1318
	7-S&T_Low (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1319
	7-S&T_Low (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1320
	7-S&T_Low (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1321
1325	7-S&T_Low (Short-Recip-UG)	_	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1322
1326	7-S&T_Low (Short-Recip-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1323
1328	7-S&T_Low (Short-Recip-UG)	2045_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1325
1329	7-S&T_Low (Short-Recip-UG)	2045_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1326
1375	8-S&T_Low (Short-Recip-Sphere)	2030_H2	Hydrogen (MMBtu/)	15040062.24	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1372
1376	8-S&T_Low (Short-Recip-Sphere)	2030_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1373
1377	8-S&T_Low (Short-Recip-Sphere)	2030_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1374
1378	8-S&T_Low (Short-Recip-Sphere)	2030_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1375
1379	8-S&T_Low (Short-Recip-Sphere)	2030_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1376
1380	8-S&T_Low (Short-Recip-Sphere)	2030_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1377
1382	8-S&T_Low (Short-Recip-Sphere)	2030_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1379
1383	8-S&T_Low (Short-Recip-Sphere)	2030_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1380
1384	8-S&T_Low (Short-Recip-Sphere)	2031_H2	Hydrogen (MMBtu/)	20039788.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1381
1385	8-S&T_Low (Short-Recip-Sphere)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1382
1386	8-S&T_Low (Short-Recip-Sphere)	2031_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1383
1387	8-S&T_Low (Short-Recip-Sphere)	2031_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1384
1388	8-S&T_Low (Short-Recip-Sphere)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1385
1389	8-S&T_Low (Short-Recip-Sphere)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1386
	8-S&T_Low (Short-Recip-Sphere)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1388
	8-S&T_Low (Short-Recip-Sphere)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1389
1393	8-S&T_Low (Short-Recip-Sphere)	2032_H2	Hydrogen (MMBtu/)	26900972.64	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1390
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1391
1395	8-S&T_Low (Short-Recip-Sphere)	2032_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1392
	8-S&T Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1393
1397	8-S&T Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1394
	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1395
	8-S&T_Low (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1397
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1398
_	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1399
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1400
	8-S&T_Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1401
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1402
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1403
1400	To act_row (and to the cip abilitie)	2000_112	kee zengen (mi) i	730	7.1. 1_0.10_0&1_1_butan rep_000anous.hish, 1. buta_11ep_0&1, cen A11405

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1					
2	Tab Contents				
	This workbook contains select tabs (i	ncluding th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1407	8-S&T_Low (Short-Recip-Sphere)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1404
1409	8-S&T_Low (Short-Recip-Sphere)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1406
1410	8-S&T_Low (Short-Recip-Sphere)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1407
1411	8-S&T_Low (Short-Recip-Sphere)	2034_H2	Hydrogen (MMBtu/)	46561611.03	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1408
1412	8-S&T_Low (Short-Recip-Sphere)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1409
1413	8-S&T_Low (Short-Recip-Sphere)	2034_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1410
1414	8-S&T_Low (Short-Recip-Sphere)	2034_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1411
1415	8-S&T_Low (Short-Recip-Sphere)	2034_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1412
1416	8-S&T_Low (Short-Recip-Sphere)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1413
1418	8-S&T_Low (Short-Recip-Sphere)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1415
1419	8-S&T_Low (Short-Recip-Sphere)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1416
1420	8-S&T_Low (Short-Recip-Sphere)	2035_H2	Hydrogen (MMBtu/)	59735032.76	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1417
1421	8-S&T_Low (Short-Recip-Sphere)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1418
1422	8-S&T_Low (Short-Recip-Sphere)	2035_H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1419
1423	8-S&T_Low (Short-Recip-Sphere)	2035_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1420
1424	8-S&T_Low (Short-Recip-Sphere)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1421
1425	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1422
	8-S&T_Low (Short-Recip-Sphere)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1424
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1425
	8-S&T_Low (Short-Recip-Sphere)	2036_H2	Hydrogen (MMBtu/)	73422447.54	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1426
1430	8-S&T_Low (Short-Recip-Sphere)	2036_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1427
	8-S&T_Low (Short-Recip-Sphere)	2036_H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1428
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1429
-	8-S&T_Low (Short-Recip-Sphere)	2036_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1430
	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1431
	8-S&T_Low (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1433
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1434
	8-S&T_Low (Short-Recip-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1435
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1436
	8-S&T_Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1437
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1438
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1439
	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1440
	8-S&T_Low (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1442
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1443
	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1444
1448	8-S&T_Low (Short-Recip-Sphere)	2038_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1445

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2	Tab Contents				
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	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "	'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	8-S&T_Low (Short-Recip-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1446
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1447
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1448
	8-S&T_Low (Short-Recip-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1449
	8-S&T_Low (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1451
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1452
	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1453
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1454
	8-S&T_Low (Short-Recip-Sphere) 8-S&T_Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1455 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1456
	8-S&T_Low (Short-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1457 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1457
	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1458
	8-S&T_Low (Short-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1460
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1461
	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1462
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1463
	8-S&T_Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1464
	8-S&T_Low (Short-Recip-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1465
	8-S&T_Low (Short-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1466
1470	8-S&T_Low (Short-Recip-Sphere)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1467
1472	8-S&T_Low (Short-Recip-Sphere)	2040_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1469
1473	8-S&T_Low (Short-Recip-Sphere)	2040_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1470
1474	8-S&T_Low (Short-Recip-Sphere)	2041_H2	Hydrogen (MMBtu/)	143683410.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1471
1475	8-S&T_Low (Short-Recip-Sphere)	2041_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1472
1476	8-S&T_Low (Short-Recip-Sphere)	2041_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1473
	8-S&T_Low (Short-Recip-Sphere)	2041_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1474
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1475
	8-S&T_Low (Short-Recip-Sphere)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1476
	8-S&T_Low (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1478
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1479
	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1480
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1481
	8-S&T_Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1482
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1483
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1484
	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1485
1490	8-S&T_Low (Short-Recip-Sphere)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1487

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2	Tab Contents				
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	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	<u> </u>			
		'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1488
	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1489
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1490
	8-S&T_Low (Short-Recip-Sphere) 8-S&T Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1491 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1492
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1493 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1493
	8-S&T_Low (Short-Recip-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1495 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1494
	8-S&T_Low (Short-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1496
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1497
	8-S&T_Low (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1498
	8-S&T_Low (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1499
	8-S&T_Low (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1500
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1501
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1502
1506	8-S&T_Low (Short-Recip-Sphere)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1503
1508	8-S&T_Low (Short-Recip-Sphere)	2044_H2	O2 Percent (scf/100-scf)	15 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1505
1509	8-S&T_Low (Short-Recip-Sphere)	2044_H2	H2 N2O EF (ppm/)	2 .	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1506
1510	8-S&T_Low (Short-Recip-Sphere)	2045_H2	Hydrogen (MMBtu/)	218158245.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1507
1511	8-S&T_Low (Short-Recip-Sphere)	2045_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1508
1512	8-S&T_Low (Short-Recip-Sphere)	2045_H2	Compression Energy (MJ/kg)	4 .	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1509
	8-S&T_Low (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1510
	8-S&T_Low (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1511
	8-S&T_Low (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1512
	8-S&T_Low (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1514
	8-S&T_Low (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1515
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1561
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1562
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1563
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1564
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1565
	9-S&T_Mid (Long-Turbine-UG) 9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1566
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1568 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1569
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1570 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1570
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1571 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1571
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1571 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1572
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1573
13/0	12 201 Wild (FOLIS LAIDILIE-00)	2031_112	Emoreticy (Introductor 100 Introductor)	31.3	12. 1_0110_0&1_1_Dutai 1cp_000ai0a3.hish, 1. Data_11cp_0&1, Cell A11373

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1		_			
2	Tab Contents				
	This workbook contains select tabs	(including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low",	"Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1574
	9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1575
	9-S&T_Mid (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1577
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1578
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1579
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1580
	9-S&T_Mid (Long-Turbine-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1581
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1582
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1583
	9-S&T_Mid (Long-Turbine-UG) 9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1584
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1586 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1587
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1588 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1588
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1589 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1589
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1590
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1591
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1592
	9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1593
	9-S&T_Mid (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1595
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1596
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1597
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1598
	9-S&T Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1599
1603	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1600
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1601
	9-S&T_Mid (Long-Turbine-UG)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1602
1607	9-S&T_Mid (Long-Turbine-UG)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1604
1608	9-S&T_Mid (Long-Turbine-UG)	2034_H2	H2 N2O EF (ppm/)	2 .	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1605
1609	9-S&T_Mid (Long-Turbine-UG)	2035_H2	Hydrogen (MMBtu/)	102244522.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1606
1610	9-S&T_Mid (Long-Turbine-UG)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1607
1611	9-S&T_Mid (Long-Turbine-UG)	2035_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1608
1612	9-S&T_Mid (Long-Turbine-UG)	2035_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1609
1613	9-S&T_Mid (Long-Turbine-UG)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1610
1614	9-S&T_Mid (Long-Turbine-UG)	2035_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1611
1616	9-S&T_Mid (Long-Turbine-UG)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1613
1617	9-S&T_Mid (Long-Turbine-UG)	2035_H2	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1614
1618	9-S&T_Mid (Long-Turbine-UG)	2036_H2	Hydrogen (MMBtu/)	122832229.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1615

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1					
2	Tab Contents	<u> </u>			
		_	is one) from a proprietary Stantec calculation tool. This o	· ·	
			"1. Data_Prep_S&T" tab. The input data in this tab was I	processed	
3	through the function in "3.1 EQ S&T	•	the results in "4. Calculations". High" correspond to the "Conservative", "Moderate", an	المن منطنط معرال المر	
1	market scenarios.	iviia , and	High correspond to the Conservative, ivioderate, an	id Ambitious	
5	market scenarios.				
6	Equipment ID	Fuel Tyne	Parameter	Value	Reference
	9-S&T Mid (Long-Turbine-UG)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1616
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1617
1621	9-S&T_Mid (Long-Turbine-UG)	2036_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1618
1622	9-S&T_Mid (Long-Turbine-UG)	2036_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1619
1623	9-S&T_Mid (Long-Turbine-UG)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1620
	9-S&T_Mid (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1622
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1623
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1624
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1625
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1626
	9-S&T_Mid (Long-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1627
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY1628
	9-S&T_Mid (Long-Turbine-UG) 9-S&T_Mid (Long-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1629 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1631
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1632
—	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1633
-	9-S&T_Mid (Long-Turbine-UG)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1634
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1635
	9-S&T_Mid (Long-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1636
1640	9-S&T_Mid (Long-Turbine-UG)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1637
1641	9-S&T_Mid (Long-Turbine-UG)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1638
	9-S&T_Mid (Long-Turbine-UG)	2038_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1640
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1641
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1642
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1643
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1644
—	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1645
\vdash	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1646
-	9-S&T_Mid (Long-Turbine-UG) 9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1647 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1649
-	9-S&T_Mid (Long-Turbine-UG)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1650
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1651
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1652
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1653
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1654
	9-S&T_Mid (Long-Turbine-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1655
1659	9-S&T_Mid (Long-Turbine-UG)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1656

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1					
2	Tab Contents				
		-	is one) from a proprietary Stantec calculation tool. This o	•	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
	through the function in "3.1 EQ S&T				
		"Mid", and "	High" correspond to the "Conservative", "Moderate", ar	id "Ambitious"	
	market scenarios.				
5	Equipment ID	Fuel Type	Parameter	Value	Reference
	9-S&T_Mid (Long-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1658
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1659
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1660
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1661
1665	9-S&T_Mid (Long-Turbine-UG)	2041_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1662
1666	9-S&T_Mid (Long-Turbine-UG)	2041_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1663
1667	9-S&T_Mid (Long-Turbine-UG)	2041_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1664
	9-S&T_Mid (Long-Turbine-UG)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1665
	9-S&T_Mid (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1667
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1668
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1669
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1670
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1671
	9-S&T_Mid (Long-Turbine-UG)	-	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1672
	9-S&T_Mid (Long-Turbine-UG) 9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1673 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1674
	9-S&T_Mid (Long-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1676 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1676
	9-S&T_Mid (Long-Turbine-UG)	-	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1677
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1678
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1679
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1680
1684	9-S&T_Mid (Long-Turbine-UG)	2043_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1681
1685	9-S&T_Mid (Long-Turbine-UG)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1682
1686	9-S&T_Mid (Long-Turbine-UG)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1683
	9-S&T_Mid (Long-Turbine-UG)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1685
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1686
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1687
	9-S&T_Mid (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1688
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1689
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1690
	9-S&T_Mid (Long-Turbine-UG) 9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1691 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1692
	9-S&T_Mid (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1694 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1694
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1695
	9-S&T_Mid (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1696
	9-S&T_Mid (Long-Turbine-UG)	-	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1697
	9-S&T_Mid (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1698
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1		_			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	9-S&T_Mid (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1699
	9-S&T_Mid (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1700
	9-S&T_Mid (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1701
	9-S&T_Mid (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1703
	9-S&T_Mid (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1704
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1750
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1751
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1752
	10-S&T_Mid (Long-Turbine-Sphere) 10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1753 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1754
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1755 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1755
	10-5&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1757 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1757
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1758 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1758
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1759
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1760
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1761
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1762
	10-S&T_Mid (Long-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1763
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1764
1769	10-S&T_Mid (Long-Turbine-Sphere)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1766
1770	10-S&T_Mid (Long-Turbine-Sphere)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1767
1771	10-S&T_Mid (Long-Turbine-Sphere)	2032_H2	Hydrogen (MMBtu/)	52582755.23	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1768
1772	10-S&T_Mid (Long-Turbine-Sphere)	2032_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1769
1773	10-S&T_Mid (Long-Turbine-Sphere)	2032_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1770
1774	10-S&T_Mid (Long-Turbine-Sphere)	2032_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1771
1775	10-S&T_Mid (Long-Turbine-Sphere)	2032_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1772
1776	10-S&T_Mid (Long-Turbine-Sphere)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1773
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1775
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1776
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1777
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1778
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1779
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1780
	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1781
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1782
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1784
1788	10-S&T_Mid (Long-Turbine-Sphere)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1785

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1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_s	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	orocessed	
3	through the function in "3.1 EQ S&T"	•			
		Mid", and "I	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1786
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1787
	10-S&T_Mid (Long-Turbine-Sphere)		Compression Energy (MJ/kg) Efficiency (MMRtu/100 MMRtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1788 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1789
	10-S&T_Mid (Long-Turbine-Sphere) 10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1789 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1790
	10-S&T_Mid (Long-Turbine-Sphere)	_			
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1791 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1793
	10-S&T Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1794 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1794
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1794 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1795
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1796 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1796
	10-S&T_Mid (Long-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1797 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1797
	10-S&T_Mid (Long-Turbine-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1798 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1798
	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1799
	10-S&T_Mid (Long-Turbine-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1800
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1802
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1803
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1804
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1805
	10-S&T_Mid (Long-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1806
	10-S&T_Mid (Long-Turbine-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1807
	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1808
1812	10-S&T_Mid (Long-Turbine-Sphere)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1809
1814	10-S&T_Mid (Long-Turbine-Sphere)	2036_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1811
1815	10-S&T_Mid (Long-Turbine-Sphere)	2036_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1812
1816	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	Hydrogen (MMBtu/)	144191023	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1813
1817	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1814
1818	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1815
1819	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1816
1820	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1817
1821	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1818
1823	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1820
1824	10-S&T_Mid (Long-Turbine-Sphere)	2037_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1821
	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	Hydrogen (MMBtu/)	165952404.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1822
1826	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1823
1827	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1824
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1825
1829	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1826

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2	Tab Contents				
	This workbook contains select tabs (i	ncluding thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5				•	
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1830	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1827
1832	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1829
1833	10-S&T_Mid (Long-Turbine-Sphere)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1830
1834	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	Hydrogen (MMBtu/)	188331988.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1831
1835	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1832
1836	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1833
1837	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1834
	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1835
1839	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1836
1841	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1838
1842	10-S&T_Mid (Long-Turbine-Sphere)	2039_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1839
1843	10-S&T_Mid (Long-Turbine-Sphere)	2040_H2	Hydrogen (MMBtu/)	211611166.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1840
1844	10-S&T_Mid (Long-Turbine-Sphere)	2040_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1841
1845	10-S&T_Mid (Long-Turbine-Sphere)	2040_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1842
1846	10-S&T_Mid (Long-Turbine-Sphere)	2040_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1843
1847	10-S&T_Mid (Long-Turbine-Sphere)	2040_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1844
1848	10-S&T_Mid (Long-Turbine-Sphere)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1845
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1847
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1848
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1849
1853	10-S&T_Mid (Long-Turbine-Sphere)	2041_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1850
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1851
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1852
	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1853
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1854
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1856
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1857
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1858
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1859
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1860
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1861
_	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1862
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1863
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1865
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1866
	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1867
1871	10-S&T_Mid (Long-Turbine-Sphere)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1868

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1		_			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding th	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_s	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was _ا	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1869
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1870
-	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1871
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1872
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1874
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1875
_	10-S&T_Mid (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1876
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1877
	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1878
	10-S&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1879
	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1880
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1881
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1883
-	10-S&T_Mid (Long-Turbine-Sphere) 10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1884
	10-S&T_Mid (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1885 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1886
-	10-S&T_Mid (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1887 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1887
	10-5&T_Mid (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1888
	10-S&T_Mid (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1889
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1890
	10-S&T_Mid (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1892
	10-S&T_Mid (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1893
	11-S&T_Mid (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1939
	11-S&T_Mid (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1940
	11-S&T_Mid (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1941
	11-S&T_Mid (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1942
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1943
-	11-S&T_Mid (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1944
	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1946
-	11-S&T_Mid (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1947
	11-S&T_Mid (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1948
	11-S&T_Mid (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1949
	11-S&T_Mid (Long-Recip-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1950
	11-S&T_Mid (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1951
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1952
	11-S&T_Mid (Long-Recip-UG)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1953
1958	11-S&T_Mid (Long-Recip-UG)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1955

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2	Tab Contents				
	This workbook contains select tabs (ir	ncluding th	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ا	processed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "N	/lid", and "	High" correspond to the "Conservative", "Moderate", an	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
1959	11-S&T_Mid (Long-Recip-UG)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1956
	11-S&T_Mid (Long-Recip-UG)	2032_H2	Hydrogen (MMBtu/)	52582755.23	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1957
	11-S&T_Mid (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1958
	11-S&T_Mid (Long-Recip-UG)	_	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1959
	11-S&T_Mid (Long-Recip-UG)		Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1960
1964	11-S&T_Mid (Long-Recip-UG)	2032_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1961
1965	11-S&T_Mid (Long-Recip-UG)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1962
	11-S&T_Mid (Long-Recip-UG)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1964
1968	11-S&T_Mid (Long-Recip-UG)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1965
1969	11-S&T_Mid (Long-Recip-UG)	2033_H2	Hydrogen (MMBtu/)	66333697.07	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1966
1970	11-S&T_Mid (Long-Recip-UG)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1967
1971	11-S&T_Mid (Long-Recip-UG)	2033_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1968
1972	11-S&T_Mid (Long-Recip-UG)	2033_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1969
1973	11-S&T_Mid (Long-Recip-UG)	2033_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1970
1974	11-S&T_Mid (Long-Recip-UG)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1971
	11-S&T_Mid (Long-Recip-UG)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1973
1977	11-S&T_Mid (Long-Recip-UG)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1974
1978	11-S&T_Mid (Long-Recip-UG)	2034_H2	Hydrogen (MMBtu/)	82842546.75	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1975
1979	11-S&T_Mid (Long-Recip-UG)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1976
	11-S&T_Mid (Long-Recip-UG)	2034_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1977
1981	11-S&T_Mid (Long-Recip-UG)	2034_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1978
	11-S&T_Mid (Long-Recip-UG)	2034_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1979
1983	11-S&T_Mid (Long-Recip-UG)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1980
1985	11-S&T_Mid (Long-Recip-UG)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1982
1986	11-S&T_Mid (Long-Recip-UG)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1983
1987	11-S&T_Mid (Long-Recip-UG)	2035_H2	Hydrogen (MMBtu/)	102244522.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1984
1988	11-S&T_Mid (Long-Recip-UG)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1985
1989	11-S&T_Mid (Long-Recip-UG)	2035_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1986
1990	11-S&T_Mid (Long-Recip-UG)	2035_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1987
1991	11-S&T_Mid (Long-Recip-UG)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1988
1992	11-S&T_Mid (Long-Recip-UG)	2035_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1989
1994	11-S&T_Mid (Long-Recip-UG)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1991
1995	11-S&T_Mid (Long-Recip-UG)	2035_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1992
1996	11-S&T_Mid (Long-Recip-UG)	2036_H2	Hydrogen (MMBtu/)	122832229.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1993
	11-S&T_Mid (Long-Recip-UG)	2036_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1994
1998	11-S&T_Mid (Long-Recip-UG)	2036_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1995
1999	11-S&T_Mid (Long-Recip-UG)	2036_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1996

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2	Tab Contents				
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	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low",	"Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	11-S&T_Mid (Long-Recip-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1997
	11-S&T_Mid (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY1998
	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2000
	11-S&T_Mid (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2001
	11-S&T_Mid (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2002
	11-S&T_Mid (Long-Recip-UG)		% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2003
	11-S&T_Mid (Long-Recip-UG) 11-S&T_Mid (Long-Recip-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2004 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2005
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2006 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2006
	11-S&T_Mid (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2007 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2007
	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2009
	11-S&T_Mid (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2010
	11-S&T_Mid (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2011
	11-S&T_Mid (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2012
	11-S&T_Mid (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2013
	11-S&T_Mid (Long-Recip-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2014
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2015
2019	11-S&T_Mid (Long-Recip-UG)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2016
2021	11-S&T_Mid (Long-Recip-UG)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2018
2022	11-S&T_Mid (Long-Recip-UG)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2019
2023	11-S&T_Mid (Long-Recip-UG)	2039_H2	Hydrogen (MMBtu/)	188331988.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2020
2024	11-S&T_Mid (Long-Recip-UG)	2039_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2021
2025	11-S&T_Mid (Long-Recip-UG)	2039_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2022
2026	11-S&T_Mid (Long-Recip-UG)	2039_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2023
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2024
	11-S&T_Mid (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2025
	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2027
	11-S&T_Mid (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2028
	11-S&T_Mid (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2029
	11-S&T_Mid (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2030
	11-S&T_Mid (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2031
	11-S&T_Mid (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2032
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2033
	11-S&T_Mid (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2034
	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2036
	11-S&T_Mid (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2037
2041	11-S&T_Mid (Long-Recip-UG)	2041_H2	Hydrogen (MMBtu/)	23/1/44//.1	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2038

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2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas", '	'1. Data_Prep_S&T" tab. The input data in this tab was រុ	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "N	Mid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	11-S&T_Mid (Long-Recip-UG)	2041_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2039
2043	11-S&T_Mid (Long-Recip-UG)	2041_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2040
2044	11-S&T_Mid (Long-Recip-UG)	2041_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2041
	11-S&T_Mid (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2042
	11-S&T_Mid (Long-Recip-UG)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2043
2048	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2045
2049	11-S&T_Mid (Long-Recip-UG)	2041_H2	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2046
	11-S&T_Mid (Long-Recip-UG)	_	Hydrogen (MMBtu/)	264300900.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2047
	11-S&T_Mid (Long-Recip-UG)	2042_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2048
	11-S&T_Mid (Long-Recip-UG)	2042_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2049
2053	11-S&T_Mid (Long-Recip-UG)	2042_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2050
2054	11-S&T_Mid (Long-Recip-UG)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2051
2055	11-S&T_Mid (Long-Recip-UG)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2052
2057	11-S&T_Mid (Long-Recip-UG)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2054
2058	11-S&T_Mid (Long-Recip-UG)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2055
2059	11-S&T_Mid (Long-Recip-UG)	2043_H2	Hydrogen (MMBtu/)	293070542.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2056
	11-S&T_Mid (Long-Recip-UG)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2057
2061	11-S&T_Mid (Long-Recip-UG)	2043_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2058
2062	11-S&T_Mid (Long-Recip-UG)	2043_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2059
	11-S&T_Mid (Long-Recip-UG)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2060
2064	11-S&T_Mid (Long-Recip-UG)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2061
	11-S&T_Mid (Long-Recip-UG)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2063
2067	11-S&T_Mid (Long-Recip-UG)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2064
	11-S&T_Mid (Long-Recip-UG)	2044_H2	Hydrogen (MMBtu/)	323447348.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2065
2069	11-S&T_Mid (Long-Recip-UG)	2044_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2066
	11-S&T_Mid (Long-Recip-UG)	2044_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2067
	11-S&T_Mid (Long-Recip-UG)	2044_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2068
2072	11-S&T_Mid (Long-Recip-UG)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2069
	11-S&T_Mid (Long-Recip-UG)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2070
2075	11-S&T_Mid (Long-Recip-UG)	2044_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2072
2076	11-S&T_Mid (Long-Recip-UG)	2044_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2073
2077	11-S&T_Mid (Long-Recip-UG)	2045_H2	Hydrogen (MMBtu/)	355381942.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2074
2078	11-S&T_Mid (Long-Recip-UG)	2045_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2075
2079	11-S&T_Mid (Long-Recip-UG)	2045_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2076
2080	11-S&T_Mid (Long-Recip-UG)	2045_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2077
2081	11-S&T_Mid (Long-Recip-UG)	2045_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2078
2082	11-S&T_Mid (Long-Recip-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2079

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1		_			
2	Tab Contents				
	This workbook contains select tabs (including th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T'	•			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter CARD CARD	Value	Reference
	11-S&T_Mid (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2081
	11-S&T_Mid (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2082
	12-S&T_Mid (Long-Recip-Sphere) 12-S&T Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2128 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2129
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2130
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2131
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2132
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2133
_	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2135
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2136
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2137
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2138
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2139
2143	12-S&T_Mid (Long-Recip-Sphere)	2031_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2140
2144	12-S&T_Mid (Long-Recip-Sphere)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2141
2145	12-S&T_Mid (Long-Recip-Sphere)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2142
2147	12-S&T_Mid (Long-Recip-Sphere)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2144
2148	12-S&T_Mid (Long-Recip-Sphere)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2145
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2146
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2147
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2148
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2149
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2150
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2151
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2153
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2154
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2155
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2156
	12-S&T_Mid (Long-Recip-Sphere) 12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMRtu/100 MMRtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2157 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2158
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2159 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2159
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2160 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2160
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2162
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2163 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2163
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2164
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2165
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2166
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2	Tab Contents				
	This workbook contains select tabs (including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "	'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	12-S&T_Mid (Long-Recip-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2167
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2168
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2169
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2171
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2172
-	12-S&T_Mid (Long-Recip-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2173
	12-S&T_Mid (Long-Recip-Sphere) 12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY2174
	-	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2175 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2176
	12-S&T_Mid (Long-Recip-Sphere) 12-S&T_Mid (Long-Recip-Sphere)		Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2177 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2177
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2178 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2178
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2180
	12-S&T_Mid (Long-Recip-Sphere)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2181
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2182
	12-S&T_Mid (Long-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2183
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2184
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2185
	12-S&T_Mid (Long-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2186
	12-S&T_Mid (Long-Recip-Sphere)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2187
2192	12-S&T_Mid (Long-Recip-Sphere)	2036_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2189
2193	12-S&T_Mid (Long-Recip-Sphere)	2036_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2190
2194	12-S&T_Mid (Long-Recip-Sphere)	2037_H2	Hydrogen (MMBtu/)	144191023	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2191
2195	12-S&T_Mid (Long-Recip-Sphere)	2037_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2192
	12-S&T_Mid (Long-Recip-Sphere)	2037_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2193
2197	12-S&T_Mid (Long-Recip-Sphere)	2037_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2194
2198	12-S&T_Mid (Long-Recip-Sphere)	2037_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2195
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2196
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2198
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2199
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2200
-	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2201
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2202
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2203
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2204
	12-S&T_Mid (Long-Recip-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2205
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2207
2211	12-S&T_Mid (Long-Recip-Sphere)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2208

	А	С	D	E	F
1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${\sf I}$	orocessed	
3	through the function in "3.1 EQ S&T"	· · · · · · · · · · · · · · · · · · ·			
		Mid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2209
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2210
	12-S&T_Mid (Long-Recip-Sphere) 12-S&T Mid (Long-Recip-Sphere)		Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2211 ALP1 GHG S&T 1 DataPrep SoCalGas.xlsx, 1. Data Prep S&T, Cell AY2212
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2213 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2213
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2214 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2214
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2216 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2216
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2217 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2217
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2218 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2218
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2219 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2219
	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2220
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2221 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2221
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2222
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2223
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2225
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2226
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2227
	12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2228
—	12-S&T_Mid (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2229
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2230
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2231
2235	12-S&T_Mid (Long-Recip-Sphere)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2232
2237	12-S&T_Mid (Long-Recip-Sphere)	2041_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2234
2238	12-S&T_Mid (Long-Recip-Sphere)	2041_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2235
2239	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	Hydrogen (MMBtu/)	264300900.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2236
2240	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2237
2241	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2238
2242	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2239
2243	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2240
2244	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2241
2246	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2243
2247	12-S&T_Mid (Long-Recip-Sphere)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2244
2248	12-S&T_Mid (Long-Recip-Sphere)	2043_H2	Hydrogen (MMBtu/)	293070542.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2245
2249	12-S&T_Mid (Long-Recip-Sphere)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2246
	12-S&T_Mid (Long-Recip-Sphere)	2043_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2247
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2248
2252	12-S&T_Mid (Long-Recip-Sphere)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2249

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1		_			
2	Tab Contents				
		_	is one) from a proprietary Stantec calculation tool. This o	•	
			"1. Data_Prep_S&T" tab. The input data in this tab was	orocessed	
3	through the function in "3.1 EQ S&T"	·		1 II A 1 · · · II	
,		iviid", and "	High" correspond to the "Conservative", "Moderate", ar	id "Ambitious"	
5	market scenarios.				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	12-S&T_Mid (Long-Recip-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2250
	12-S&T_Mid (Long-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2252
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2253
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2254
2258	12-S&T_Mid (Long-Recip-Sphere)	2044_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2255
2259	12-S&T_Mid (Long-Recip-Sphere)	2044_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2256
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2257
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2258
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2259
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2261
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2262
	12-S&T_Mid (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2263
	12-S&T_Mid (Long-Recip-Sphere) 12-S&T_Mid (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2264
	12-S&T_Mid (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2265 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2266
	12-S&T_Mid (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2267
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2268
	12-S&T_Mid (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2270
	12-S&T_Mid (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2271
2320	13-S&T_Mid (Short-Turbine-UG)	2030_H2	Hydrogen (MMBtu/)	32394468.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2317
2321	13-S&T_Mid (Short-Turbine-UG)	2030_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2318
2322	13-S&T_Mid (Short-Turbine-UG)	2030_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2319
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2320
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2321
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2322
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2324
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2325
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2326
	13-S&T_Mid (Short-Turbine-UG) 13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2327 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2328
	13-S&T_Mid (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2329
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2330
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2331
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2333
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2334
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2335
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2336

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1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding thi	is one) from a proprietary Stantec calculation tool. This $lpha$	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T"	<u> </u>			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	13-S&T_Mid (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2337
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2338
	13-S&T_Mid (Short-Turbine-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2339
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2340
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2342
	13-S&T_Mid (Short-Turbine-UG) 13-S&T_Mid (Short-Turbine-UG)		H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2343 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2344
_	4	_	, , ,		
	13-S&T_Mid (Short-Turbine-UG) 13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2345 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2346
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2347 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2347
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2348
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2349
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2351
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2352
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2353
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2354
	13-S&T_Mid (Short-Turbine-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2355
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2356
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2357
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2358
	13-S&T_Mid (Short-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2360
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2361
2365	13-S&T_Mid (Short-Turbine-UG)	2035_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2362
	13-S&T_Mid (Short-Turbine-UG)	2035_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2363
	13-S&T_Mid (Short-Turbine-UG)	2035_H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2364
2368	13-S&T_Mid (Short-Turbine-UG)	2035_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2365
2369	13-S&T_Mid (Short-Turbine-UG)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2366
2370	13-S&T_Mid (Short-Turbine-UG)	2035_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2367
2372	13-S&T_Mid (Short-Turbine-UG)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2369
2373	13-S&T_Mid (Short-Turbine-UG)	2035_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2370
	13-S&T_Mid (Short-Turbine-UG)	2036_H2	Hydrogen (MMBtu/)	122832229.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2371
2375	13-S&T_Mid (Short-Turbine-UG)	2036_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2372
2376	13-S&T_Mid (Short-Turbine-UG)	2036_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2373
2377	13-S&T_Mid (Short-Turbine-UG)	2036_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2374
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2375
	13-S&T_Mid (Short-Turbine-UG)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2376
2381	13-S&T_Mid (Short-Turbine-UG)	2036_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2378

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1		_			
2	Tab Contents				
		_	s one) from a proprietary Stantec calculation tool. This o	•	
			"1. Data_Prep_S&T" tab. The input data in this tab was I	orocessed	
3	through the function in "3.1 EQ S&T				
		"Mid", and "	High" correspond to the "Conservative", "Moderate", an	id "Ambitious"	
4	market scenarios.				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	13-S&T_Mid (Short-Turbine-UG)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2379
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2380
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2381
	13-S&T_Mid (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2382
2386	13-S&T_Mid (Short-Turbine-UG)	2037_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2383
2387	13-S&T_Mid (Short-Turbine-UG)	2037_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2384
	13-S&T_Mid (Short-Turbine-UG)	2037_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2385
_	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2387
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2388
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2389
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2390
	13-S&T_Mid (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2391
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2392
	13-S&T_Mid (Short-Turbine-UG) 13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2393 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2394
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2396
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2397
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2398
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2399
	13-S&T_Mid (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2400
2404	13-S&T_Mid (Short-Turbine-UG)	2039_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2401
2405	13-S&T_Mid (Short-Turbine-UG)	2039_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2402
2406	13-S&T_Mid (Short-Turbine-UG)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2403
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2405
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2406
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2407
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2408
	13-S&T_Mid (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2409
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2410
	13-S&T_Mid (Short-Turbine-UG) 13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2411 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2412
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2412 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2414
	13-S&T_Mid (Short-Turbine-UG)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2415
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2416
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2417
	13-S&T_Mid (Short-Turbine-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2418
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2419

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1		-			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"				
		⁄Iid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2420
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2421
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2423
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2424
	13-S&T_Mid (Short-Turbine-UG) 13-S&T_Mid (Short-Turbine-UG)		Hydrogen (MMBtu/) % H3 Storod (sef/100 sef)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2425 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2426
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2427 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2427
_	13-S&T_Mid (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2428
	13-5&T_Wild (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2429
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2430
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2432
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2433
	13-S&T_Mid (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2434
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2435
	13-S&T_Mid (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2436
	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2437
	13-S&T_Mid (Short-Turbine-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2438
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2439
	13-S&T_Mid (Short-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2441
2445	13-S&T_Mid (Short-Turbine-UG)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2442
2446	13-S&T_Mid (Short-Turbine-UG)	2044_H2	Hydrogen (MMBtu/)	323447348.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2443
2447	13-S&T_Mid (Short-Turbine-UG)	2044_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2444
2448	13-S&T_Mid (Short-Turbine-UG)	2044_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2445
2449	13-S&T_Mid (Short-Turbine-UG)	2044_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2446
2450	13-S&T_Mid (Short-Turbine-UG)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2447
	13-S&T_Mid (Short-Turbine-UG)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2448
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2450
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2451
	13-S&T_Mid (Short-Turbine-UG)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2452
	13-S&T_Mid (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2453
	13-S&T_Mid (Short-Turbine-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2454
_	13-S&T_Mid (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2455
	13-S&T_Mid (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2456
	13-S&T_Mid (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2457
	13-S&T_Mid (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2459
	13-S&T_Mid (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2460
2509	14-S&T_Mid (Short-Turbine-Sphere)	2030_H2	Hydrogen (MMBtu/)	32394468.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2506

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1		_			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was \parallel	orocessed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter CALLOS	Value	Reference
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2507
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2508
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2509
	14-S&T_Mid (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2510
	14-S&T_Mid (Short-Turbine-Sphere) 14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2511 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2513
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2514 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2514
	14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2515 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2515
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2516 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2516
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2517 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2517
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2518 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2518
	14-S&T_Mid (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2519
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2520
	14-S&T_Mid (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2522
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2523
	14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2524
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2525
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2526
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2527
2531	14-S&T_Mid (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2528
2532	14-S&T_Mid (Short-Turbine-Sphere)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2529
2534	14-S&T_Mid (Short-Turbine-Sphere)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2531
2535	14-S&T_Mid (Short-Turbine-Sphere)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2532
2536	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	Hydrogen (MMBtu/)	66333697.07	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2533
2537	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2534
2538	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2535
2539	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2536
2540	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2537
2541	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2538
2543	14-S&T_Mid (Short-Turbine-Sphere)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2540
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2541
	14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2542
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2543
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2544
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2545
	14-S&T_Mid (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2546
2550	14-S&T_Mid (Short-Turbine-Sphere)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2547

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1		_			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was $\mathfrak p$	orocessed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	14-S&T_Mid (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2549
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2550
	14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2551
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2552
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2553
	14-S&T_Mid (Short-Turbine-Sphere) 14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY2554
	14-S&T Mid (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2555 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2556
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2558 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2558
	14-S&T Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2559
	14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2560
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2561
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2562
	14-S&T_Mid (Short-Turbine-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2563
	14-S&T_Mid (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2564
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2565
	14-S&T_Mid (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2567
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2568
	14-S&T_Mid (Short-Turbine-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2569
	14-S&T Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2570
	14-S&T_Mid (Short-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2571
	14-S&T_Mid (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2572
	14-S&T_Mid (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2573
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2574
	14-S&T_Mid (Short-Turbine-Sphere)	2037_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2576
2580	14-S&T_Mid (Short-Turbine-Sphere)	2037_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2577
2581	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	Hydrogen (MMBtu/)	165952404.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2578
2582	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2579
2583	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2580
2584	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2581
2585	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2582
2586	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2583
2588	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2585
2589	14-S&T_Mid (Short-Turbine-Sphere)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2586
2590	14-S&T_Mid (Short-Turbine-Sphere)	2039_H2	Hydrogen (MMBtu/)	188331988.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2587
2591	14-S&T_Mid (Short-Turbine-Sphere)	2039_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2588
2592	14-S&T_Mid (Short-Turbine-Sphere)	2039_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2589

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1		,			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was \mid	processed	
3	through the function in "3.1 EQ S&T"				
		ااd", and "ا	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2590
	14-S&T_Mid (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2591
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2592
	14-S&T_Mid (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2594
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2595
_	14-S&T_Mid (Short-Turbine-Sphere) 14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY2596
	14-S&T Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY2597
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2598 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2599
	14-S&T Mid (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2600
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2601 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2601
	14-S&T_Mid (Short-Turbine-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2603
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2604
	14-S&T_Mid (Short-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2605
	14-S&T_Mid (Short-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2606
	14-S&T_Mid (Short-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2607
	14-S&T_Mid (Short-Turbine-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2608
	14-S&T_Mid (Short-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2609
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2610
	14-S&T Mid (Short-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2612
	14-S&T_Mid (Short-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2613
	14-S&T_Mid (Short-Turbine-Sphere)	_	***		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2614
	14-S&T Mid (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2615
2619	14-S&T_Mid (Short-Turbine-Sphere)	2042 H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2616
	14-S&T_Mid (Short-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2617
2621	14-S&T_Mid (Short-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2618
2622	14-S&T_Mid (Short-Turbine-Sphere)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2619
2624	14-S&T_Mid (Short-Turbine-Sphere)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2621
2625	14-S&T_Mid (Short-Turbine-Sphere)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2622
2626	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	Hydrogen (MMBtu/)	293070542.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2623
2627	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2624
2628	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2625
2629	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2626
2630	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2627
2631	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2628
2633	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2630
2634	14-S&T_Mid (Short-Turbine-Sphere)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2631

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2		7			
\vdash	Tab Contents				
	•	_	s one) from a proprietary Stantec calculation tool. This o	· 1	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	L Data_Prep_S&T" tab. The input data in this tab was $\mathfrak p$	orocessed	
-	through the function in "3.1 EQ S&T"				
		/lid", and "l	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
\vdash	market scenarios.				
5		_			
-	Equipment ID		Parameter	Value	Reference
-		_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2632
$\overline{}$		_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2633
\vdash			Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2634
$\overline{}$		_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2635
-	_ ` `	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2636
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2637
		_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2639
		_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2640
		_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2641
-		_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2642
-		_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2643
-		_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2644
-		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2645 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2646
$\overline{}$		_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2648 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2648
\vdash		_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2649
-		_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2695
-		_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2696
			Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2697
-		_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2698
-	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2699
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2700
$\overline{}$		_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2702
-		_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2703
-		_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2704
-		_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2705
-		_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2706
$\overline{}$		_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2707
$\overline{}$		_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2708
	_ ` ` '	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2709
		_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2711
		_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2712
-		_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2713
$\overline{}$		_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2714
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2715
-		_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2716
2720	15-S&T_Mid (Short-Recip-UG)	2032_H2	Pipeline Length (mi/)	450 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2717

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1					
2	Tab Contents				
	This workbook contains select tabs	(including th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	orocessed	
3	through the function in "3.1 EQ S&T	Γ" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low",	"Mid", and "	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2718
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2720
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2721
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2722
	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2723
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2724
	15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2725
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2726
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2727
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2729
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2730
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2731
	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2732
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2733
	15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2734
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2735
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2736
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2738
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2739
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2740
	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2741
	15-S&T_Mid (Short-Recip-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2742
	15-S&T_Mid (Short-Recip-UG)		Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2743
	15-S&T_Mid (Short-Recip-UG)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2744
	15-S&T_Mid (Short-Recip-UG) 15-S&T Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2745
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2747
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2748
	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2749
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2750
	15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2751 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2752
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		
	-	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2753
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2754
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2756
	15-S&T_Mid (Short-Recip-UG)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2757
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/) % H3 Storod (set/100 set)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2758
2/62	15-S&T_Mid (Short-Recip-UG)	2037_H2	% H2 Stored (scf/100-scf)	13.8282/01/	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2759

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1					
2	Tab Contents				
	This workbook contains select tabs	(including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low",	"Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
	Equipment ID		Parameter	Value	Reference
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2760
	15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2761
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2762
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2763
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2765
	15-S&T_Mid (Short-Recip-UG)		H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2766
	15-S&T_Mid (Short-Recip-UG) 15-S&T Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2767 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2768
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2769 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2769
	15-S&T Mid (Short-Recip-0d)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2770 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2770
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2771
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2772
	15-S&T_Mid (Short-Recip-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2774
	, 15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2775
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2776
2780	15-S&T_Mid (Short-Recip-UG)	2039_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2777
2781	15-S&T_Mid (Short-Recip-UG)	2039_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2778
2782	15-S&T_Mid (Short-Recip-UG)	2039_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2779
2783	15-S&T_Mid (Short-Recip-UG)	2039_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2780
2784	15-S&T_Mid (Short-Recip-UG)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2781
2786	15-S&T_Mid (Short-Recip-UG)	2039_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2783
2787	15-S&T_Mid (Short-Recip-UG)	2039_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2784
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2785
	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2786
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2787
	15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2788
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2789
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2790
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2792
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2793
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2794
	15-S&T_Mid (Short-Recip-UG)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2795
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2796
	15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2797
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2798
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2799
2804	15-S&T_Mid (Short-Recip-UG)	2041_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2801

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1		_			
2	Tab Contents				
	This workbook contains select tabs (i	ncluding th	is one) from a proprietary Stantec calculation tool. This $lpha$	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T"	•			
		Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2802
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2803
	15-S&T_Mid (Short-Recip-UG)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2804
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2805
—	15-S&T_Mid (Short-Recip-UG) 15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2806 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2807
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2808 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2810
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2811 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2811
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2812 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2812
	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2813 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2813
	15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2814 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2814
	15-S&T_Mid (Short-Recip-OG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2815
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2816
	15-S&T_Mid (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2817
	15-S&T_Mid (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2819
	15-S&T_Mid (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2820
	15-S&T_Mid (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2821
—	15-S&T_Mid (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2822
	, 15-S&T_Mid (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2823
	, 15-S&T_Mid (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2824
	15-S&T_Mid (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2825
2829	15-S&T_Mid (Short-Recip-UG)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2826
	15-S&T_Mid (Short-Recip-UG)	2044_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2828
2832	15-S&T_Mid (Short-Recip-UG)	2044_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2829
2833	15-S&T_Mid (Short-Recip-UG)	2045_H2	Hydrogen (MMBtu/)	355381942.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2830
2834	15-S&T_Mid (Short-Recip-UG)	2045_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2831
2835	15-S&T_Mid (Short-Recip-UG)	2045_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2832
2836	15-S&T_Mid (Short-Recip-UG)	2045_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2833
2837	15-S&T_Mid (Short-Recip-UG)	2045_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2834
2838	15-S&T_Mid (Short-Recip-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2835
2840	15-S&T_Mid (Short-Recip-UG)	2045_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2837
2841	15-S&T_Mid (Short-Recip-UG)	2045_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2838
	16-S&T_Mid (Short-Recip-Sphere)	2030_H2	Hydrogen (MMBtu/)	32394468.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2884
	16-S&T_Mid (Short-Recip-Sphere)	2030_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2885
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2886
2890	16-S&T_Mid (Short-Recip-Sphere)	2030_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2887

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2	Tab Contents				
	This workbook contains select tabs (i	including thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was \mid	orocessed	
3	through the function in "3.1 EQ S&T'				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter Picture I and	Value	Reference
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2888
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2889
	16-S&T_Mid (Short-Recip-Sphere) 16-S&T_Mid (Short-Recip-Sphere)		O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2891
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2892 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2893
	16-S&T_Mid (Short-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2894 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2894
	16-S&T_Mid (Short-Recip-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2895 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2895
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2896 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2896
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2897 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2897
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2898
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2900
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2901
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2902
	16-S&T_Mid (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2903
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2904
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2905
	16-S&T_Mid (Short-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2906
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2907
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2909
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2910
	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2911
2915	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2912
2916	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2913
2917	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2914
2918	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2915
2919	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2916
2921	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2918
2922	16-S&T_Mid (Short-Recip-Sphere)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2919
2923	16-S&T_Mid (Short-Recip-Sphere)	2034_H2	Hydrogen (MMBtu/)	82842546.75	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2920
	16-S&T_Mid (Short-Recip-Sphere)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2921
	16-S&T_Mid (Short-Recip-Sphere)	2034_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2922
2926	16-S&T_Mid (Short-Recip-Sphere)	2034_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2923
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2924
	16-S&T_Mid (Short-Recip-Sphere)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2925
	16-S&T_Mid (Short-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2927
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2928
2932	16-S&T_Mid (Short-Recip-Sphere)	2035_H2	Hydrogen (MMBtu/)	102244522.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2929

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1		_			
2	Tab Contents				
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	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T'	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID	•	Parameter	Value	Reference
	16-S&T_Mid (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2930
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2931
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2932
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2933
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2934
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2936
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2937
	16-S&T_Mid (Short-Recip-Sphere) 16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2938 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2939
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2940 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2940
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2941 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2941
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2942
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2943
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2945
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2946
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2947
	16-S&T_Mid (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2948
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2949
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2950
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)	450 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2951
	16-S&T_Mid (Short-Recip-Sphere)	2037_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2952
2957	16-S&T_Mid (Short-Recip-Sphere)	2037_H2	O2 Percent (scf/100-scf)	15 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2954
2958	16-S&T_Mid (Short-Recip-Sphere)	2037_H2	H2 N2O EF (ppm/)	2 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2955
2959	16-S&T_Mid (Short-Recip-Sphere)	2038_H2	Hydrogen (MMBtu/)	165952404.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2956
2960	16-S&T_Mid (Short-Recip-Sphere)	2038_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2957
2961	16-S&T_Mid (Short-Recip-Sphere)	2038_H2	Compression Energy (MJ/kg)	4 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2958
2962	16-S&T_Mid (Short-Recip-Sphere)	2038_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2959
2963	16-S&T_Mid (Short-Recip-Sphere)	2038_H2	Pipeline Length (mi/)	450 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2960
2964	16-S&T_Mid (Short-Recip-Sphere)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2961
-	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2963
-	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2964
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2965
	16-S&T_Mid (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2966
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2967
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2968
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2969
2973	16-S&T_Mid (Short-Recip-Sphere)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2970

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1		_			
2	Tab Contents				
	This workbook contains select tabs (i	including thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	L Data_Prep_S&T" tab. The input data in this tab was $_{L}$	processed	
3	through the function in "3.1 EQ S&T'	· · · · · · · · · · · · · · · · · · ·			
		Mid", and "I	High" correspond to the "Conservative", "Moderate", an	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter Control of the Control of	Value	Reference
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2972
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2973
	16-S&T_Mid (Short-Recip-Sphere) 16-S&T_Mid (Short-Recip-Sphere)		Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY2974
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2975 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2976
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2977 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2977
	16-S&T_Mid (Short-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2978 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2978
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2979
_	16-S&T_Mid (Short-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2981
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2982
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2983
	16-S&T_Mid (Short-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2984
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2985
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2986
	16-S&T_Mid (Short-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2987
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2988
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2990
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2991
	16-S&T_Mid (Short-Recip-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2992
2996	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2993
2997	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2994
2998	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2995
2999	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2996
3000	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2997
3002	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY2999
3003	16-S&T_Mid (Short-Recip-Sphere)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3000
3004	16-S&T_Mid (Short-Recip-Sphere)	2043_H2	Hydrogen (MMBtu/)	293070542.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3001
3005	16-S&T_Mid (Short-Recip-Sphere)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3002
3006	16-S&T_Mid (Short-Recip-Sphere)	2043_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3003
	16-S&T_Mid (Short-Recip-Sphere)	2043_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3004
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3005
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3006
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3008
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3009
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3010
	16-S&T_Mid (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3011
3015	16-S&T_Mid (Short-Recip-Sphere)	2044_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3012

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1					
2	Tab Contents				
	This workbook contains select tabs (including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T'	' to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	16-S&T_Mid (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3013
	16-S&T_Mid (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3014
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3015
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3017
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3018
	16-S&T_Mid (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3019
	16-S&T_Mid (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3020
	16-S&T_Mid (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3021
	16-S&T_Mid (Short-Recip-Sphere)		Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3022
	16-S&T_Mid (Short-Recip-Sphere) 16-S&T_Mid (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3023
	16-S&T_Mid (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3024 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3026
	16-S&T_Mid (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3027 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3027
	17-S&T_High (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3073
	17-5&T_High (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3074 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3074
	17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3075
	17-S&T_High (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3076
	17-S&T_High (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3077
	17-S&T_High (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3078
	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3080
	17-S&T_High (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3081
_	17-S&T_High (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3082
	17-S&T_High (Long-Turbine-UG)	2031_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3083
	17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3084
3088	17-S&T_High (Long-Turbine-UG)	2031_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3085
3089	17-S&T_High (Long-Turbine-UG)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3086
3090	17-S&T_High (Long-Turbine-UG)	2031_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3087
3092	17-S&T_High (Long-Turbine-UG)	2031_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3089
3093	17-S&T_High (Long-Turbine-UG)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3090
3094	17-S&T_High (Long-Turbine-UG)	2032_H2	Hydrogen (MMBtu/)	173491362.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3091
3095	17-S&T_High (Long-Turbine-UG)	2032_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3092
3096	17-S&T_High (Long-Turbine-UG)	2032_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3093
3097	17-S&T_High (Long-Turbine-UG)	2032_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3094
3098	17-S&T_High (Long-Turbine-UG)	2032_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3095
3099	17-S&T_High (Long-Turbine-UG)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3096
3101	17-S&T_High (Long-Turbine-UG)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3098
3102	17-S&T_High (Long-Turbine-UG)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3099

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1					
2	Tab Contents				
	This workbook contains select tabs (in	ncluding th	is one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ا	processed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "N	Mid", and "	High" correspond to the "Conservative", "Moderate", an	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3103	17-S&T_High (Long-Turbine-UG)	2033_H2	Hydrogen (MMBtu/)	200485117.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3100
3104	17-S&T_High (Long-Turbine-UG)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3101
3105	17-S&T_High (Long-Turbine-UG)	2033_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3102
3106	17-S&T_High (Long-Turbine-UG)	2033_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3103
3107	17-S&T_High (Long-Turbine-UG)	2033_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3104
3108	17-S&T_High (Long-Turbine-UG)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3105
3110	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3107
3111	17-S&T_High (Long-Turbine-UG)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3108
3112	17-S&T_High (Long-Turbine-UG)	2034_H2	Hydrogen (MMBtu/)	230240132.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3109
3113	17-S&T_High (Long-Turbine-UG)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3110
3114	17-S&T_High (Long-Turbine-UG)	2034_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3111
3115	17-S&T_High (Long-Turbine-UG)	2034_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3112
3116	17-S&T_High (Long-Turbine-UG)	2034_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3113
3117	17-S&T_High (Long-Turbine-UG)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3114
3119	17-S&T_High (Long-Turbine-UG)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3116
3120	17-S&T_High (Long-Turbine-UG)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3117
3121	17-S&T_High (Long-Turbine-UG)	2035_H2	Hydrogen (MMBtu/)	262745046.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3118
3122	17-S&T_High (Long-Turbine-UG)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3119
	17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3120
3124	17-S&T_High (Long-Turbine-UG)	2035_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3121
3125	17-S&T_High (Long-Turbine-UG)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3122
	17-S&T_High (Long-Turbine-UG)	2035_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3123
3128	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3125
3129	17-S&T_High (Long-Turbine-UG)	2035_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3126
3130	17-S&T_High (Long-Turbine-UG)	2036_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3127
-	17-S&T_High (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3128
-	17-S&T_High (Long-Turbine-UG)	2036_H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3129
	17-S&T_High (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3130
3134	17-S&T_High (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3131
	17-S&T_High (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3132
	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3134
	17-S&T_High (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3135
	17-S&T_High (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3136
	17-S&T_High (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3137
	17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3138
	17-S&T_High (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3139
3143	17-S&T_High (Long-Turbine-UG)	2037_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3140

	A	С	D	E	F
1					
2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_s	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ا	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
			High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3144	17-S&T_High (Long-Turbine-UG)	2037_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3141
3146	17-S&T_High (Long-Turbine-UG)	2037_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3143
3147	17-S&T_High (Long-Turbine-UG)	2037_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3144
3148	17-S&T_High (Long-Turbine-UG)	2038_H2	Hydrogen (MMBtu/)	370083058.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3145
3149	17-S&T_High (Long-Turbine-UG)	2038_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3146
3150	17-S&T_High (Long-Turbine-UG)	2038_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3147
3151	17-S&T_High (Long-Turbine-UG)	2038_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3148
3152	17-S&T_High (Long-Turbine-UG)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3149
3153	17-S&T_High (Long-Turbine-UG)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3150
3155	17-S&T_High (Long-Turbine-UG)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3152
3156	17-S&T_High (Long-Turbine-UG)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3153
3157	17-S&T_High (Long-Turbine-UG)	2039_H2	Hydrogen (MMBtu/)	408188959.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3154
3158	17-S&T_High (Long-Turbine-UG)	2039_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3155
3159	17-S&T_High (Long-Turbine-UG)	2039_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3156
3160	17-S&T_High (Long-Turbine-UG)	2039_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3157
3161	17-S&T_High (Long-Turbine-UG)	2039_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3158
3162	17-S&T_High (Long-Turbine-UG)	2039_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3159
3164	17-S&T_High (Long-Turbine-UG)	2039_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3161
3165	17-S&T_High (Long-Turbine-UG)	2039_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3162
3166	17-S&T_High (Long-Turbine-UG)	2040_H2	Hydrogen (MMBtu/)	448126955.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3163
3167	17-S&T_High (Long-Turbine-UG)	2040_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3164
3168	17-S&T_High (Long-Turbine-UG)	2040_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3165
3169	17-S&T_High (Long-Turbine-UG)	2040_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3166
3170	17-S&T_High (Long-Turbine-UG)	2040_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3167
3171	17-S&T_High (Long-Turbine-UG)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3168
3173	17-S&T_High (Long-Turbine-UG)	2040_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3170
3174	17-S&T_High (Long-Turbine-UG)	2040_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3171
3175	17-S&T_High (Long-Turbine-UG)	2041_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3172
	17-S&T_High (Long-Turbine-UG)	2041_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3173
3177	17-S&T_High (Long-Turbine-UG)	2041_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3174
3178	17-S&T_High (Long-Turbine-UG)	2041_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3175
3179	17-S&T_High (Long-Turbine-UG)	2041_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3176
3180	17-S&T_High (Long-Turbine-UG)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3177
3182	17-S&T_High (Long-Turbine-UG)	2041_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3179
3183	17-S&T_High (Long-Turbine-UG)	_	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3180
	17-S&T_High (Long-Turbine-UG)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3181
3185	17-S&T_High (Long-Turbine-UG)	2042_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3182

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1		,			
2	Tab Contents				
	·	_	s one) from a proprietary Stantec calculation tool. This o	•	
			"1. Data_Prep_S&T" tab. The input data in this tab was ${ t I}$	orocessed	
3	through the function in "3.1 EQ S&T"	<u> </u>			
		ااd", and "ا	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5	F				
6	Equipment ID		Parameter Compression France (MI/Irg)	Value	Reference
	17-S&T_High (Long-Turbine-UG) 17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3183
	17-S&T_High (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3184 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3185
-	17-5&T_High (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3186 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3186
	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3188
	17-S&T_High (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3189
	17-S&T_High (Long-Turbine-UG)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3190
	17-S&T_High (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3191
	17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1 GHG S&T 1 DataPrep SoCalGas.xlsx, 1. Data Prep S&T, Cell AY3192
	17-S&T_High (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3193
3197	17-S&T_High (Long-Turbine-UG)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3194
3198	17-S&T_High (Long-Turbine-UG)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3195
3200	17-S&T_High (Long-Turbine-UG)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3197
3201	17-S&T_High (Long-Turbine-UG)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3198
-	17-S&T_High (Long-Turbine-UG)	_	Hydrogen (MMBtu/)	623776900.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3199
-	17-S&T_High (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3200
	17-S&T_High (Long-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3201
	17-S&T_High (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3202
	17-S&T_High (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3203
	17-S&T_High (Long-Turbine-UG)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3204
	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3206
	17-S&T_High (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3207
	17-S&T_High (Long-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3208
	17-S&T_High (Long-Turbine-UG) 17-S&T High (Long-Turbine-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3209 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3210
	17-S&T_High (Long-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3211 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3211
-	17-S&T_High (Long-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3211 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3212
-	17-S&T_High (Long-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3213
	17-S&T_High (Long-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3215
-	17-S&T_High (Long-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3216
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3262
	18-S&T_High (Long-Turbine-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3263
	18-S&T_High (Long-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3264
3268	18-S&T_High (Long-Turbine-Sphere)	2030_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3265
3269	18-S&T_High (Long-Turbine-Sphere)	2030_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3266
3270	18-S&T_High (Long-Turbine-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3267
3272	18-S&T_High (Long-Turbine-Sphere)	2030_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3269

	А	С	D	E	F
1		-			
2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	orocessed	
3	through the function in "3.1 EQ S&T"	•			
		/lid", and "ا	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3270
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3271
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3272
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3273
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3274
	18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3275
	18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3276 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3278
	18-S&T_High (Long-Turbine-Sphere) 18-S&T High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3279 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3279
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3280 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3280
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3281 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3281
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3282
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3283
	18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3284
	18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3285
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3287
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3288
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3289
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3290
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3291
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3292
	18-S&T_High (Long-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3293
3297	18-S&T_High (Long-Turbine-Sphere)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3294
3299	18-S&T_High (Long-Turbine-Sphere)	2033_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3296
3300	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3297
3301	18-S&T_High (Long-Turbine-Sphere)	2034_H2	Hydrogen (MMBtu/)	230240132.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3298
3302	18-S&T_High (Long-Turbine-Sphere)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3299
3303	18-S&T_High (Long-Turbine-Sphere)	2034_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3300
3304	18-S&T_High (Long-Turbine-Sphere)	2034_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3301
3305	18-S&T_High (Long-Turbine-Sphere)	2034_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3302
3306	18-S&T_High (Long-Turbine-Sphere)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3303
3308	18-S&T_High (Long-Turbine-Sphere)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3305
3309	18-S&T_High (Long-Turbine-Sphere)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3306
3310	18-S&T_High (Long-Turbine-Sphere)	2035_H2	Hydrogen (MMBtu/)	262745046.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3307
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3308
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3309
3313	18-S&T_High (Long-Turbine-Sphere)	2035_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3310

	A	С	D	Е	F
1		7			
2	Tab Contents				
	·-	_	s one) from a proprietary Stantec calculation tool. This	•	
			"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	•			
		⁄lid", and "I	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5	Facility and ID	5 J.T	2	V-1 -	
6	Equipment ID 19 SST High (Long Turbing Sphere)		Parameter Displing Longth (mi/)	Value	Reference ALD1 CHC SST 1 DataBron SoCalCac view 1 Data Bron SST Call AV2211
	18-S&T_High (Long-Turbine-Sphere) 18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3311 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3312
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3314
	18-S&T High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3315
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3316
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3317
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3318
3322	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3319
3323	18-S&T_High (Long-Turbine-Sphere)	2036_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3320
3324	18-S&T_High (Long-Turbine-Sphere)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3321
3326	18-S&T_High (Long-Turbine-Sphere)	2036_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3323
3327	18-S&T_High (Long-Turbine-Sphere)	2036_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3324
3328	18-S&T_High (Long-Turbine-Sphere)	2037_H2	Hydrogen (MMBtu/)	333310118.8	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3325
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3326
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3327
	18-S&T_High (Long-Turbine-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3328
	18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3329
	18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3330
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3332
	18-S&T_High (Long-Turbine-Sphere) 18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/) Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3333 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3334
	18-S&T High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3335
	18-S&T High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3336
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3337
	18-S&T High (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3338
	18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3339
	18-S&T_High (Long-Turbine-Sphere)	2038_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3341
3345	18-S&T_High (Long-Turbine-Sphere)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3342
3346	18-S&T_High (Long-Turbine-Sphere)	2039_H2	Hydrogen (MMBtu/)	408188959.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3343
3347	18-S&T_High (Long-Turbine-Sphere)	2039_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3344
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3345
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3346
	18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3347
	18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3348
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3350
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3351
3355	18-S&T_High (Long-Turbine-Sphere)	2040_H2	Hydrogen (MMBtu/)	448126955.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3352

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1		7			
2	Tab Contents				
	•	_	is one) from a proprietary Stantec calculation tool. This o	·	
			"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	<u> </u>		1 II a 1 1 1 1 II	
		Viid", and "	High" correspond to the "Conservative", "Moderate", ar	id "Ambitious"	
4	market scenarios.				
5	Equipment ID	Fuel Type	Parameter	Value	Reference
	18-S&T_High (Long-Turbine-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3353
	18-S&T_High (Long-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3354
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3355
	18-S&T_High (Long-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3356
3360	18-S&T_High (Long-Turbine-Sphere)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3357
3362	18-S&T_High (Long-Turbine-Sphere)	2040_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3359
3363	18-S&T_High (Long-Turbine-Sphere)	2040_H2	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3360
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3361
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3362
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3363
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3364
	18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3365
	18-S&T_High (Long-Turbine-Sphere) 18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3366
	18-S&T_High (Long-Turbine-Sphere)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3368 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3369
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3370
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3371
	18-S&T_High (Long-Turbine-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3372
	18-S&T_High (Long-Turbine-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3373
3377	18-S&T_High (Long-Turbine-Sphere)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3374
3378	18-S&T_High (Long-Turbine-Sphere)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3375
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3377
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3378
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3379
-	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3380
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3381
-	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3382
-	18-S&T_High (Long-Turbine-Sphere) 18-S&T_High (Long-Turbine-Sphere)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3383 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3384
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3386
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3387
	18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3388
	18-S&T_High (Long-Turbine-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3389
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3390
	18-S&T_High (Long-Turbine-Sphere)	2044_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3391
3395	18-S&T_High (Long-Turbine-Sphere)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3392
3396	18-S&T_High (Long-Turbine-Sphere)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3393

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2	Tab Contents				
	This workbook contains select tabs (in	ncluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
			"1. Data_Prep_S&T" tab. The input data in this tab was $\mathfrak p$	orocessed	
3	through the function in "3.1 EQ S&T"	•			
		ااd", and "ا	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter CARD CARD CARD CARD CARD CARD CARD CARD	Value	Reference
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3395
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3396
	18-S&T_High (Long-Turbine-Sphere) 18-S&T_High (Long-Turbine-Sphere)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3397 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3398
	18-S&T_High (Long-Turbine-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3399 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3399
	18-S&T_High (Long-Turbine-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3400
	18-S&T_High (Long-Turbine-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3401 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3401
	18-S&T_High (Long-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3402
	18-S&T_High (Long-Turbine-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3404
	18-S&T_High (Long-Turbine-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3405
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3451
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3452
	19-S&T_High (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3453
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3454
	19-S&T_High (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3455
3459	19-S&T_High (Long-Recip-UG)	2030_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3456
	19-S&T_High (Long-Recip-UG)	2030_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3458
3462	19-S&T_High (Long-Recip-UG)	2030_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3459
3463	19-S&T_High (Long-Recip-UG)	2031_H2	Hydrogen (MMBtu/)	149054169.1	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3460
3464	19-S&T_High (Long-Recip-UG)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3461
3465	19-S&T_High (Long-Recip-UG)	2031_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3462
	19-S&T_High (Long-Recip-UG)	2031_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3463
	19-S&T_High (Long-Recip-UG)	2031_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3464
	19-S&T_High (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3465
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3467
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3468
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3469
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3470
	19-S&T_High (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3471
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3472
	19-S&T_High (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3473
	19-S&T_High (Long-Recip-UG)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3474
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3476
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3477
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3478
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY3479
5483	19-S&T_High (Long-Recip-UG)	2033_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3480

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1		_			
2	Tab Contents				
	This workbook contains select tabs (in	cluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	oCalGas", '	'1. Data_Prep_S&T" tab. The input data in this tab was រុ	orocessed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "N	1id", and "F	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5					
	Equipment ID		Parameter	Value	Reference
-		_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3481
-		_	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3482
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3483
3488	19-S&T_High (Long-Recip-UG)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3485
3489	19-S&T_High (Long-Recip-UG)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3486
3490	19-S&T_High (Long-Recip-UG)	2034_H2	Hydrogen (MMBtu/)	230240132.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3487
3491	19-S&T_High (Long-Recip-UG)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3488
3492	19-S&T_High (Long-Recip-UG)	2034_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3489
3493	19-S&T_High (Long-Recip-UG)	2034_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3490
3494	19-S&T_High (Long-Recip-UG)	2034_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3491
3495	19-S&T_High (Long-Recip-UG)	2034_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3492
3497	19-S&T_High (Long-Recip-UG)	2034_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3494
3498	19-S&T_High (Long-Recip-UG)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3495
3499	19-S&T_High (Long-Recip-UG)	2035_H2	Hydrogen (MMBtu/)	262745046.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3496
3500	19-S&T_High (Long-Recip-UG)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3497
3501	19-S&T_High (Long-Recip-UG)	2035_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3498
3502	19-S&T_High (Long-Recip-UG)	2035_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3499
3503	19-S&T_High (Long-Recip-UG)	2035_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3500
3504	19-S&T_High (Long-Recip-UG)	2035_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3501
3506	19-S&T_High (Long-Recip-UG)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3503
3507	19-S&T_High (Long-Recip-UG)	2035_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3504
3508	19-S&T_High (Long-Recip-UG)	2036_H2	Hydrogen (MMBtu/)	296544623.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3505
3509	19-S&T_High (Long-Recip-UG)	2036_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3506
3510	19-S&T_High (Long-Recip-UG)	2036_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3507
3511	19-S&T_High (Long-Recip-UG)	2036_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3508
3512	19-S&T_High (Long-Recip-UG)	2036_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3509
3513	19-S&T_High (Long-Recip-UG)	2036_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3510
3515	19-S&T_High (Long-Recip-UG)	2036_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3512
3516	19-S&T_High (Long-Recip-UG)	2036_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3513
3517	19-S&T_High (Long-Recip-UG)	2037_H2	Hydrogen (MMBtu/)	333310118.8	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3514
3518	19-S&T_High (Long-Recip-UG)	2037_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3515
3519	19-S&T_High (Long-Recip-UG)	2037_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3516
3520	19-S&T_High (Long-Recip-UG)	2037_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3517
3521	19-S&T_High (Long-Recip-UG)	2037_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3518
3522	19-S&T_High (Long-Recip-UG)	2037_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3519
3524	19-S&T_High (Long-Recip-UG)	2037_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3521
3525	19-S&T_High (Long-Recip-UG)	2037_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3522

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2	Tab Contents				
	This workbook contains select tabs ((including th	s one) from a proprietary Stantec calculation tool. This o	data is copied	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was p	-	
3	through the function in "3.1 EQ S&T				
		·	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.	,,,,,,	3 ,		
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
	19-S&T_High (Long-Recip-UG)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3523
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3524
	19-S&T_High (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3525
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3526
	19-S&T_High (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3527
	19-S&T_High (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3528
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3530
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3531
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3532
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3533
	19-S&T_High (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3534
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3535
	19-S&T_High (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3536
	19-S&T_High (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3537
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3539
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3540
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3541
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3541 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3542
	19-S&T_High (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3543 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3543
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3544 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3544
	-	_			
	19-S&T_High (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3545
	19-S&T_High (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3546
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3548
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3549
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3550
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3551
	19-S&T_High (Long-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3552
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3553
	19-S&T_High (Long-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3554
	19-S&T_High (Long-Recip-UG)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3555
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3557
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3558
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3559
	19-S&T_High (Long-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3560
	19-S&T_High (Long-Recip-UG)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3561
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3562
3566	19-S&T_High (Long-Recip-UG)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3563

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2	Tab Contents				
	This workbook contains select tabs (i	including th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "I	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3567	19-S&T_High (Long-Recip-UG)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3564
3569	19-S&T_High (Long-Recip-UG)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3566
3570	19-S&T_High (Long-Recip-UG)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3567
3571	19-S&T_High (Long-Recip-UG)	2043_H2	Hydrogen (MMBtu/)	576956761.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3568
3572	19-S&T_High (Long-Recip-UG)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3569
3573	19-S&T_High (Long-Recip-UG)	2043_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3570
	19-S&T_High (Long-Recip-UG)	2043_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3571
3575	19-S&T_High (Long-Recip-UG)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3572
3576	19-S&T_High (Long-Recip-UG)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3573
3578	19-S&T_High (Long-Recip-UG)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3575
3579	19-S&T_High (Long-Recip-UG)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3576
3580	19-S&T_High (Long-Recip-UG)	2044_H2	Hydrogen (MMBtu/)	623776900.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3577
3581	19-S&T_High (Long-Recip-UG)	2044_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3578
3582	19-S&T_High (Long-Recip-UG)	2044_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3579
3583	19-S&T_High (Long-Recip-UG)	2044_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3580
3584	19-S&T_High (Long-Recip-UG)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3581
3585	19-S&T_High (Long-Recip-UG)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3582
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3584
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3585
	19-S&T_High (Long-Recip-UG)	_	Hydrogen (MMBtu/)	672551001	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3586
3590	19-S&T_High (Long-Recip-UG)	2045_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3587
	19-S&T_High (Long-Recip-UG)	2045_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3588
	19-S&T_High (Long-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3589
	19-S&T_High (Long-Recip-UG)	2045_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3590
	19-S&T_High (Long-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3591
	19-S&T_High (Long-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3593
	19-S&T_High (Long-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3594
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3640
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3641
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3642
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3643
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3644
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3645
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3647
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3648
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3649
3653	20-S&T_High (Long-Recip-Sphere)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3650

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2	Tab Contents				
	This workbook contains select tabs (including th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was \mid	processed	
3	through the function in "3.1 EQ S&T'	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3651
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3652
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3653
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3654
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3656
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3657
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3658
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3659
	20-S&T_High (Long-Recip-Sphere) 20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3660 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3661
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3662
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3663
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3665
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3666
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3667
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3668
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3669
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3670
—	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3671
3675	20-S&T_High (Long-Recip-Sphere)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3672
3677	20-S&T_High (Long-Recip-Sphere)	2033_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3674
3678	20-S&T_High (Long-Recip-Sphere)	2033_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3675
3679	20-S&T_High (Long-Recip-Sphere)	2034_H2	Hydrogen (MMBtu/)	230240132.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3676
3680	20-S&T_High (Long-Recip-Sphere)	2034_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3677
	20-S&T_High (Long-Recip-Sphere)	2034_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3678
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3679
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3680
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3681
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3683
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3684
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3685
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3686
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3687
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3688
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3689
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3690
3695	20-S&T_High (Long-Recip-Sphere)	2035_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3692

	A	С	D	E	F
1		_			
2	Tab Contents				
	This workbook contains select tabs (including thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T'				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3693
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3694
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3695 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3696
	20-S&T_High (Long-Recip-Sphere)	_	, , , , ,		
	20-S&T_High (Long-Recip-Sphere) 20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu) Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3697 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3698
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3699 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3699
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3701
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3702 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3702
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3703 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3703
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3704 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3704
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3705
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3706
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3707
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3708
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3710
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3711
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3712
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3713
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3714
3718	20-S&T_High (Long-Recip-Sphere)	2038_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3715
3719	20-S&T_High (Long-Recip-Sphere)	2038_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3716
3720	20-S&T_High (Long-Recip-Sphere)	2038_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3717
3722	20-S&T_High (Long-Recip-Sphere)	2038_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3719
3723	20-S&T_High (Long-Recip-Sphere)	2038_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3720
3724	20-S&T_High (Long-Recip-Sphere)	2039_H2	Hydrogen (MMBtu/)	408188959.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3721
3725	20-S&T_High (Long-Recip-Sphere)	2039_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3722
3726	20-S&T_High (Long-Recip-Sphere)	2039_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3723
3727	20-S&T_High (Long-Recip-Sphere)	2039_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3724
3728	20-S&T_High (Long-Recip-Sphere)	2039_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3725
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3726
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3728
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3729
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3730
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3731
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3732
3736	20-S&T_High (Long-Recip-Sphere)	2040_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3733

	А	С	D	Е	F
1		_			
2	Tab Contents				
	This workbook contains select tabs (including thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T'				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5			-		
6	Equipment ID		Parameter Picture 1 (vi /)	Value	Reference
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3734
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3735
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY3737
	20-S&T_High (Long-Recip-Sphere) 20-S&T_High (Long-Recip-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3738
	20-S&T_High (Long-Recip-Sphere)		Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3739 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3740
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3741 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3741
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3742
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3743
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3744 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3744
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3746
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3747
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3748
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3749
	20-S&T_High (Long-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3750
	20-S&T_High (Long-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3751
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3752
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3753
	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3755
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3756
	20-S&T_High (Long-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3757
	20-S&T_High (Long-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3758
	20-S&T_High (Long-Recip-Sphere)	2043_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3759
3763	20-S&T_High (Long-Recip-Sphere)	2043_H2	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3760
	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3761
	20-S&T_High (Long-Recip-Sphere)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3762
3767	20-S&T_High (Long-Recip-Sphere)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3764
3768	20-S&T_High (Long-Recip-Sphere)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3765
3769	20-S&T_High (Long-Recip-Sphere)	2044_H2	Hydrogen (MMBtu/)	623776900.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3766
3770	20-S&T_High (Long-Recip-Sphere)	2044_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3767
3771	20-S&T_High (Long-Recip-Sphere)	2044_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3768
3772	20-S&T_High (Long-Recip-Sphere)	2044_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3769
3773	20-S&T_High (Long-Recip-Sphere)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3770
3774	20-S&T_High (Long-Recip-Sphere)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3771
3776	20-S&T_High (Long-Recip-Sphere)	2044_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3773
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3774
3778	20-S&T_High (Long-Recip-Sphere)	2045_H2	Hydrogen (MMBtu/)	672551001	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3775

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1		_			
2	Tab Contents				1
		_	is one) from a proprietary Stantec calculation tool. This	•	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T	<u> </u>	e the results in "4. Calculations". High" correspond to the "Conservative", "Moderate", ar	ad "Ambitique"	
4	market scenarios.	iviiu , aiiu	right correspond to the Conservative, ividuelate, an	id Ambitious	
5	market sechanos.				
6	Equipment ID	Fuel Type	Parameter	Value	Reference
3779	20-S&T_High (Long-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3776
3780	20-S&T_High (Long-Recip-Sphere)	2045_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3777
3781	20-S&T_High (Long-Recip-Sphere)	2045_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3778
3782	20-S&T_High (Long-Recip-Sphere)	_	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3779
	20-S&T_High (Long-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3780
_	20-S&T_High (Long-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3782
	20-S&T_High (Long-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3783
_	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3829
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3830
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3831 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3832
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3833
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3834
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3836
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3837
3841	21-S&T_High (Short-Turbine-UG)	2031_H2	Hydrogen (MMBtu/)	149054169.1	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3838
3842	21-S&T_High (Short-Turbine-UG)	2031_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3839
3843	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3840
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3841
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3842
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3843
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3845
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3846
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3847 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3848
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3849
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3850
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3851
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3852
3857	21-S&T_High (Short-Turbine-UG)	2032_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3854
3858	21-S&T_High (Short-Turbine-UG)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3855
3859	21-S&T_High (Short-Turbine-UG)	2033_H2	Hydrogen (MMBtu/)	200485117.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3856
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3857
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3858
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3859
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3860
3864	21-S&T_High (Short-Turbine-UG)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3861

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1		_			
2	Tab Contents				
	-	_	is one) from a proprietary Stantec calculation tool. This o	·	
			"1. Data_Prep_S&T" tab. The input data in this tab was ${\sf I}$	orocessed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5	E. Constant				
6	Equipment ID		Parameter O3 Paramet (set/100 set)	Value	Reference
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3863
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3864 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3865
-	21-S&T_High (Short-Turbine-UG)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3866
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3867
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3868
_	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3869
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3870
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3872
3876	21-S&T_High (Short-Turbine-UG)	2034_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3873
	21-S&T_High (Short-Turbine-UG)	2035_H2	Hydrogen (MMBtu/)	262745046.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3874
3878	21-S&T_High (Short-Turbine-UG)	2035_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3875
3879	21-S&T_High (Short-Turbine-UG)	2035_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3876
3880	21-S&T_High (Short-Turbine-UG)	2035_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3877
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3878
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3879
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3881
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3882
	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3883
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3884
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3885
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3886
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/) H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3887 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3888
	21-S&T_High (Short-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3890
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3891
	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3892
	21-S&T High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3893
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3894
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3895
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3896
_	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3897
3902	21-S&T_High (Short-Turbine-UG)	2037_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3899
3903	21-S&T_High (Short-Turbine-UG)	2037_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3900
3904	21-S&T_High (Short-Turbine-UG)	2038_H2	Hydrogen (MMBtu/)	370083058.7	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3901
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3902
3906	21-S&T_High (Short-Turbine-UG)	2038_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3903

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1		_			
2	Tab Contents				
	This workbook contains select tabs (including th	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was \mid	processed	
3	through the function in "3.1 EQ S&T	•			
		'Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	21-S&T_High (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3904
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3905
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3906
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY3908
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3909 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3910
	21-S&T_High (Short-Turbine-UG)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3911 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3911
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3912
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3913
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3914
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3915
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3917
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3918
	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3919
3923	21-S&T_High (Short-Turbine-UG)	2040_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3920
3924	21-S&T_High (Short-Turbine-UG)	2040_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3921
3925	21-S&T_High (Short-Turbine-UG)	2040_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3922
3926	21-S&T_High (Short-Turbine-UG)	2040_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3923
3927	21-S&T_High (Short-Turbine-UG)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3924
3929	21-S&T_High (Short-Turbine-UG)	2040_H2	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3926
3930	21-S&T_High (Short-Turbine-UG)	2040_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3927
	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3928
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3929
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3930
	21-S&T_High (Short-Turbine-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3931
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3932
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3933
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3935
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3936
	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/) % H2 Stored (sef/100 sef)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY3937
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3938
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3939 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3940
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3940 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3941
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3941 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3942
	21-S&T_High (Short-Turbine-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3944 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3944
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3945
J340	121 301_High (Short-Larbine-00)	ZU4Z_NZ	112 NZO LI (PPIII)		71. 1_0110_3&1_1_Data11ep_30Cal0as.xisx, 1. Data_Flep_3&1, Cell A15345

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1		,			
2	Tab Contents				
	-	_	s one) from a proprietary Stantec calculation tool. This o	·	
			"1. Data_Prep_S&T" tab. The input data in this tab was ${\mathfrak l}$	orocessed	
3	through the function in "3.1 EQ S&T"				
		/lid", and "I	High" correspond to the "Conservative", "Moderate", an	id "Ambitious"	
4	market scenarios.				
5	F				
6	Equipment ID		Parameter Under the Control of the	Value	Reference
	21-S&T_High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3946
	21-S&T_High (Short-Turbine-UG) 21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3947 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3948
	21-S&T_High (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3949
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3950
-	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3951 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3951
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3953
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3954
	21-S&T High (Short-Turbine-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3955
	21-S&T_High (Short-Turbine-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3956
	21-S&T_High (Short-Turbine-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3957
	21-S&T_High (Short-Turbine-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3958
	21-S&T_High (Short-Turbine-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3959
	21-S&T_High (Short-Turbine-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3960
	21-S&T_High (Short-Turbine-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3962
3966	21-S&T_High (Short-Turbine-UG)	2044_H2	H2 N2O EF (ppm/)	2 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3963
3967	21-S&T_High (Short-Turbine-UG)	2045_H2	Hydrogen (MMBtu/)	672551001	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3964
3968	21-S&T_High (Short-Turbine-UG)	2045_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3965
3969	21-S&T_High (Short-Turbine-UG)	2045_H2	Compression Energy (MJ/kg)	14 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3966
3970	21-S&T_High (Short-Turbine-UG)	2045_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3967
3971	21-S&T_High (Short-Turbine-UG)	2045_H2	Pipeline Length (mi/)	450 /	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3968
3972	21-S&T_High (Short-Turbine-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3969
	- - · · · · · · · · · · · · · · · · · ·	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3971
	21-S&T_High (Short-Turbine-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY3972
	22-S&T_High (Short-Turbine-Sphere)	_	, , ,		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4018
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4019
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4020
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4021
-	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4022
-		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4023
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4025
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4026
	22-S&T_High (Short-Turbine-Sphere)	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4027
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4028
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4029
	22-S&T_High (Short-Turbine-Sphere) 22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4030 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4031
4034	122-381 Lukii (311011-11110111e-3buere)	7031_UZ	ripeinie tengui (iiii/)	450 /	ALFI_GIIG_3&1_I_DataFIEP_30CalGaS.xiSx, I. Data_FIEP_3&1, Cell AY4031

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1		,			
2	Tab Contents				
	This workbook contains select tabs (in	cluding thi	s one) from a proprietary Stantec calculation tool. This o	data is copied	
			"1. Data_Prep_S&T" tab. The input data in this tab was រុ	orocessed	
3	through the function in "3.1 EQ S&T"				
		/lid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5	E				
6	Equipment ID		Parameter	Value	Reference
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4032
	22-S&T_High (Short-Turbine-Sphere) 22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4034 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4035
	22-S&T High (Short-Turbine-Sphere)				ALP1 GHG S&T 1 DataPrep SoCalGas.xlsx, 1. Data_Frep_3&T, Cell AY4036
	22-S&T_High (Short-Turbine-Sphere)	_	, , ,		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4037
	22-S&T_High (Short-Turbine-Sphere)	_	·		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4038
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4039
	22-S&T High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4040
	`	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4041
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4043
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4044
4048	22-S&T_High (Short-Turbine-Sphere)	2033_H2	Hydrogen (MMBtu/)	200485117.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4045
4049	22-S&T_High (Short-Turbine-Sphere)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4046
4050	22-S&T_High (Short-Turbine-Sphere)	2033_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4047
4051	22-S&T_High (Short-Turbine-Sphere)	2033_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4048
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4049
	1		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4050
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4052
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4053
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4054
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4055
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4056
	22-S&T_High (Short-Turbine-Sphere)	_	• • • • • • • • • • • • • • • • • • • •		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4057
	22-S&T_High (Short-Turbine-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4058 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4059
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4061 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4061
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4062
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4063
	22-S&T_High (Short-Turbine-Sphere)	_	• •		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4064
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4065
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4066
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4067
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4068
	22-S&T_High (Short-Turbine-Sphere)	_	·		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4070
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4071
4075	22-S&T_High (Short-Turbine-Sphere)	2036_H2	Hydrogen (MMBtu/)	296544623.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4072
4076	22-S&T_High (Short-Turbine-Sphere)	2036_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4073

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2	Tab Contents				
			s one) from a proprietary Stantec calculation tool. This o		
			"1. Data_Prep_S&T" tab. The input data in this tab was _ا	orocessed	
3	through the function in "3.1 EQ S&T"				
		/lid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5	Farriam and ID	Fred Tone	D	Mala a	Defenses
6	Equipment ID		Parameter Compression Energy (MI/kg)	Value	Reference
	22-S&T_High (Short-Turbine-Sphere) 22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4074 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4075
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4076 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4076
	- · · · · · · · · · · · · · · · · ·		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4077
	22-S&T_High (Short-Turbine-Sphere)	_	·		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4079
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4080
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4081
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4082
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4083
4087	22-S&T_High (Short-Turbine-Sphere)	2037_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4084
4088	22-S&T_High (Short-Turbine-Sphere)	2037_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4085
4089	22-S&T_High (Short-Turbine-Sphere)	2037_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4086
4091	22-S&T_High (Short-Turbine-Sphere)	2037_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4088
4092	22-S&T_High (Short-Turbine-Sphere)	2037_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4089
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4090
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4091
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4092
	22-S&T_High (Short-Turbine-Sphere)	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4093
	22-S&T_High (Short-Turbine-Sphere)		-		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4094
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4095
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4097
	22-S&T_High (Short-Turbine-Sphere) 22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4098 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4099
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4100
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4101
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4102
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4103
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4104
	22-S&T_High (Short-Turbine-Sphere)	_	•		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4106
	22-S&T_High (Short-Turbine-Sphere)	_		2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4107
4111	22-S&T_High (Short-Turbine-Sphere)	2040_H2	Hydrogen (MMBtu/)	448126955.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4108
4112	22-S&T_High (Short-Turbine-Sphere)	2040_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4109
4113	22-S&T_High (Short-Turbine-Sphere)	2040_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4110
4114	22-S&T_High (Short-Turbine-Sphere)	2040_H2	Efficiency (MMBtu/100-MMBtu)	51.9	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4111
	22-S&T_High (Short-Turbine-Sphere)		-		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4112
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4113
4118	22-S&T_High (Short-Turbine-Sphere)	2040_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4115

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1		,			
2	Tab Contents				
	This workbook contains select tabs (ir	ncluding thi	is one) from a proprietary Stantec calculation tool. This $lpha$	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${\sf I}$	orocessed	
3	through the function in "3.1 EQ S&T"	•			
		/lid", and "l	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5	- •				
6	Equipment ID		Parameter (Value of the control of t	Value	Reference
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4116
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4117
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY4118
	22-S&T_High (Short-Turbine-Sphere) 22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4119 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4120
	22-S&T_High (Short-Turbine-Sphere)	_	• •		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4121 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4121
	<u> </u>	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4122 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4122
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4124
	22-S&T High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4125
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4126
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4127
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4128
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4129
4133	22-S&T_High (Short-Turbine-Sphere)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4130
4134	22-S&T_High (Short-Turbine-Sphere)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4131
4136	22-S&T_High (Short-Turbine-Sphere)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4133
4137	22-S&T_High (Short-Turbine-Sphere)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4134
4138	22-S&T_High (Short-Turbine-Sphere)	2043_H2	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4135
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4136
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4137
	22-S&T_High (Short-Turbine-Sphere)	_	• • • • • • • • • • • • • • • • • • • •		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4138
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4139
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4140
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4142
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4143
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4144
	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4145
	22-S&T_High (Short-Turbine-Sphere) 22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4146 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4147
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4148 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4148
		_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4149 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4149
_	22-S&T_High (Short-Turbine-Sphere)				ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4151
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4152
	22-S&T_High (Short-Turbine-Sphere)	_	** *		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4153
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4154
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4155
	22-S&T_High (Short-Turbine-Sphere)	_			ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4156
7133	122 301_INST (SHOLL TURNING-SPITELE)	20-73_112	Emorency (whitebox) 100 whitebox	31.3	7.E. 1_0170_0&1_1_Dutai 10P_000ai0a3.xi3x, 1. Data_110P_0&1, Cell A14100

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1					
2	Tab Contents				
	This workbook contains select tabs (in	cluding thi	s one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_S	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was \mid	orocessed	
3	through the function in "3.1 EQ S&T"				
		/lid", and "l	High" correspond to the "Conservative", "Moderate", ar	d "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	4	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4157
	4	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4158
	4	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4160
		_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4161
	23-S&T_High (Short-Recip-UG)		Hydrogen (MMBtu/) % H2 Stored (sef/100-sef)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4207 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4208
	23-S&T_High (Short-Recip-UG) 23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf) Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4209 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4209
	23-S&T_High (Short-Recip-UG)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4210 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4210
	23-S&T High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4211 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4211
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4211 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4212
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4214 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4214
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4215 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4215
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4216 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4216
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4217
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4218
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4219
	23-S&T_High (Short-Recip-UG)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4220
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4221
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4223
4227	23-S&T_High (Short-Recip-UG)	2031_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4224
4228	23-S&T_High (Short-Recip-UG)	2032_H2	Hydrogen (MMBtu/)	173491362.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4225
4229	23-S&T_High (Short-Recip-UG)	2032_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4226
4230	23-S&T_High (Short-Recip-UG)	2032_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4227
4231	23-S&T_High (Short-Recip-UG)	2032_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4228
4232	23-S&T_High (Short-Recip-UG)	2032_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4229
4233	23-S&T_High (Short-Recip-UG)	2032_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4230
4235	23-S&T_High (Short-Recip-UG)	2032_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4232
4236	23-S&T_High (Short-Recip-UG)	2032_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4233
4237	23-S&T_High (Short-Recip-UG)	2033_H2	Hydrogen (MMBtu/)	200485117.2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4234
4238	23-S&T_High (Short-Recip-UG)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4235
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4236
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4237
	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4238
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4239
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4241
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4242
4246	23-S&T_High (Short-Recip-UG)	2034_H2	Hydrogen (MMBtu/)	230240132.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4243

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2	Tab Contents				
	This workbook contains select tabs	(including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep	_SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was ${}_{\parallel}$	processed	
3	through the function in "3.1 EQ S&T	" to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low",	"Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5					
6	Equipment ID		Parameter	Value	Reference
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4244
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4245
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4246
	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4247
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4248
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4250
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4251
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4252
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4253
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4254
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4255
	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4256
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km) O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4257
	23-S&T_High (Short-Recip-UG) 23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4259 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4260
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4261 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4261
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4262
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4263
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4264
	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4265
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4266
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4268
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1 GHG S&T 1 DataPrep SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4269
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4270
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4271
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4272
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4273
	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4274
-	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4275
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4277
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4278
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4279
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4280
	23-S&T_High (Short-Recip-UG)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4281
	23-S&T_High (Short-Recip-UG)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4282
	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4283
	23-S&T_High (Short-Recip-UG)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4284
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2	Tab Contents				
	This workbook contains select tabs (including thi	is one) from a proprietary Stantec calculation tool. This o	data is copied	
		_	"1. Data_Prep_S&T" tab. The input data in this tab was p	•	
3	through the function in "3.1 EQ S&T				
			High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.	•			
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4289	23-S&T_High (Short-Recip-UG)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4286
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4287
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4288
	23-S&T_High (Short-Recip-UG)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4289
	23-S&T_High (Short-Recip-UG)	2039_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4290
4294	23-S&T_High (Short-Recip-UG)	2039_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4291
_	23-S&T_High (Short-Recip-UG)	_	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4292
_	23-S&T_High (Short-Recip-UG)	2039 H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4293
	23-S&T_High (Short-Recip-UG)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4295
	23-S&T_High (Short-Recip-UG)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4296
	23-S&T_High (Short-Recip-UG)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4297
	23-S&T_High (Short-Recip-UG)	2040_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4298
	23-S&T_High (Short-Recip-UG)	2040_H2	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4299
4303	23-S&T_High (Short-Recip-UG)	2040_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4300
4304	23-S&T_High (Short-Recip-UG)	2040_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4301
4305	23-S&T_High (Short-Recip-UG)	2040_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4302
4307	23-S&T_High (Short-Recip-UG)	2040_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4304
4308	23-S&T_High (Short-Recip-UG)	2040_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4305
4309	23-S&T_High (Short-Recip-UG)	2041_H2	Hydrogen (MMBtu/)	488985592.8	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4306
4310	23-S&T_High (Short-Recip-UG)	2041_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4307
4311	23-S&T_High (Short-Recip-UG)	2041_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4308
4312	23-S&T_High (Short-Recip-UG)	2041_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4309
4313	23-S&T_High (Short-Recip-UG)	2041_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4310
4314	23-S&T_High (Short-Recip-UG)	2041_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4311
4316	23-S&T_High (Short-Recip-UG)	2041_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4313
4317	23-S&T_High (Short-Recip-UG)	2041_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4314
4318	23-S&T_High (Short-Recip-UG)	2042_H2	Hydrogen (MMBtu/)	531870935.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4315
4319	23-S&T_High (Short-Recip-UG)	2042_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4316
4320	23-S&T_High (Short-Recip-UG)	2042_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4317
4321	23-S&T_High (Short-Recip-UG)	2042_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4318
4322	23-S&T_High (Short-Recip-UG)	2042_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4319
4323	23-S&T_High (Short-Recip-UG)	2042_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4320
4325	23-S&T_High (Short-Recip-UG)	2042_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4322
4326	23-S&T_High (Short-Recip-UG)	2042_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4323
4327	23-S&T_High (Short-Recip-UG)	2043_H2	Hydrogen (MMBtu/)	576956761.4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4324
4328	23-S&T_High (Short-Recip-UG)	2043_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4325
4329	23-S&T_High (Short-Recip-UG)	2043_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4326

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2	Tab Contents				
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	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".		
	In this workbook, the terms "Low", "	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4330	23-S&T_High (Short-Recip-UG)	2043_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4327
4331	23-S&T_High (Short-Recip-UG)	2043_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4328
4332	23-S&T_High (Short-Recip-UG)	2043_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4329
4334	23-S&T_High (Short-Recip-UG)	2043_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4331
4335	23-S&T_High (Short-Recip-UG)	2043_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4332
4336	23-S&T_High (Short-Recip-UG)	2044_H2	Hydrogen (MMBtu/)	623776900.6	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4333
4337	23-S&T_High (Short-Recip-UG)	2044_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4334
4338	23-S&T_High (Short-Recip-UG)	2044_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4335
4339	23-S&T_High (Short-Recip-UG)	2044_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4336
4340	23-S&T_High (Short-Recip-UG)	2044_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4337
4341	23-S&T_High (Short-Recip-UG)	2044_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4338
4343	23-S&T_High (Short-Recip-UG)	2044_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4340
4344	23-S&T_High (Short-Recip-UG)	2044_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4341
4345	23-S&T_High (Short-Recip-UG)	2045_H2	Hydrogen (MMBtu/)	672551001	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4342
4346	23-S&T_High (Short-Recip-UG)	2045_H2	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4343
4347	23-S&T_High (Short-Recip-UG)	2045_H2	Compression Energy (MJ/kg)	14	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4344
4348	23-S&T_High (Short-Recip-UG)	2045_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4345
4349	23-S&T_High (Short-Recip-UG)	2045_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4346
4350	23-S&T_High (Short-Recip-UG)	2045_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4347
4352	23-S&T_High (Short-Recip-UG)	2045_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4349
4353	23-S&T_High (Short-Recip-UG)	2045_H2	H2 N2O EF (ppm/)	2	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4350
4399	24-S&T_High (Short-Recip-Sphere)	2030_H2	Hydrogen (MMBtu/)	126886641.5	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4396
4400	24-S&T_High (Short-Recip-Sphere)	2030_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4397
4401	24-S&T_High (Short-Recip-Sphere)	2030_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4398
4402	24-S&T_High (Short-Recip-Sphere)	2030_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4399
	24-S&T_High (Short-Recip-Sphere)	2030_H2	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4400
4404	24-S&T_High (Short-Recip-Sphere)	2030_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4401
	24-S&T_High (Short-Recip-Sphere)	2030_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4403
4407	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4404
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4405
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4406
_	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4407
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4408
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4409
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4410
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4412
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4413
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1		_			
2	Tab Contents				
		_	s one) from a proprietary Stantec calculation tool. This o	•	
			"1. Data_Prep_S&T" tab. The input data in this tab was _ا	orocessed	
3	through the function in "3.1 EQ S&T"				
		Mid", and "I	High" correspond to the "Conservative", "Moderate", an	d "Ambitious"	
4	market scenarios.				
5	Farriage and ID	Fred Trees	D	Mala a	Defense.
6	Equipment ID		Parameter Lludrogen (MAMPtu/)	Value	Reference
	24-S&T_High (Short-Recip-Sphere) 24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/) % H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4414 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4415
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4416 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4416
	24-S&T_High (Short-Recip-Sphere)		Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4417
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4418
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4419
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4421
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4422
	24-S&T High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4423
4427	24-S&T_High (Short-Recip-Sphere)	2033_H2	% H2 Stored (scf/100-scf)	13.82827017	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4424
4428	24-S&T_High (Short-Recip-Sphere)	2033_H2	Compression Energy (MJ/kg)	4	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4425
4429	24-S&T_High (Short-Recip-Sphere)	2033_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4426
4430	24-S&T_High (Short-Recip-Sphere)	2033_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4427
4431	24-S&T_High (Short-Recip-Sphere)	2033_H2	H2 Consumption Per Km (MMBtu/100-MMBtu * km)	0.009333333	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4428
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4430
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4431
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4432
	24-S&T_High (Short-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4433
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4434
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4435
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4436
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4437
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf) H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4439
	24-S&T_High (Short-Recip-Sphere) 24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4440 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4441
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4442 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4442
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4443
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4444
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4445
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4446
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4448
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4449
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4450
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4451
4455	24-S&T_High (Short-Recip-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4452
	24-S&T_High (Short-Recip-Sphere)	2036_H2	Efficiency (MMBtu/100-MMBtu)	60.3	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4453
4457	24-S&T_High (Short-Recip-Sphere)	2036_H2	Pipeline Length (mi/)	450	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4454

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2	Tab Contents				
	This workbook contains select tabs (i	including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	to produce	e the results in "4. Calculations".		
	In this workbook, the terms "Low", "	Mid", and "	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.				
5		_			
6	Equipment ID		Parameter	Value	Reference
	24-S&T_High (Short-Recip-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4455
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4457
	24-S&T_High (Short-Recip-Sphere)		H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4458
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4459
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4460
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4461
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4462
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4463
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4464
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4466
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4467
	24-S&T_High (Short-Recip-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4468
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataProp_SoCalGas.xlsx, 1. Data_Prop_S&T, Cell AY4469
	24-S&T_High (Short-Recip-Sphere) 24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg) Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4470 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4471
	24-S&T_High (Short-Recip-Sphere)		Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4472 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4472
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4473
	24-S&T_High (Short-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4475 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4475
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4476
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4477
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4478
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4479
	24-S&T High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4480
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4481
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4482
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4484
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4485
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4486
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4487
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4488
_	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4489
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4490
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4491
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4493
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4494
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4495
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4496
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2	Tab Contents				
	This workbook contains select tabs (i	including th	is one) from a proprietary Stantec calculation tool. This	data is copied	
	from "ALP1_GHG_S&T_1_DataPrep_	SoCalGas",	"1. Data_Prep_S&T" tab. The input data in this tab was	processed	
3	through the function in "3.1 EQ S&T"	_	_ :-		
		•	High" correspond to the "Conservative", "Moderate", ar	nd "Ambitious"	
4	market scenarios.	•			
5					
6	Equipment ID	Fuel Type	Parameter	Value	Reference
4500	24-S&T_High (Short-Recip-Sphere)		Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4497
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4498
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4499
-	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4500
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4502
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4503
	24-S&T_High (Short-Recip-Sphere)		Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4504
_	24-S&T_High (Short-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4505
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4506
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4507
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4508
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4509
	24-S&T_High (Short-Recip-Sphere)		O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4511
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4512
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4513
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4514
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4515
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4516 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4516
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4517
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4518 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4518
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4520 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4520
	-1	_	·		
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4521
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4522
	24-S&T_High (Short-Recip-Sphere)	_	% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4523
	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4524
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4525
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4526
	24-S&T_High (Short-Recip-Sphere)		H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4527
	24-S&T_High (Short-Recip-Sphere)	_	O2 Percent (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4529
	24-S&T_High (Short-Recip-Sphere)	_	H2 N2O EF (ppm/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4530
	24-S&T_High (Short-Recip-Sphere)	_	Hydrogen (MMBtu/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4531
_	24-S&T_High (Short-Recip-Sphere)		% H2 Stored (scf/100-scf)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4532
_	24-S&T_High (Short-Recip-Sphere)	_	Compression Energy (MJ/kg)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4533
	24-S&T_High (Short-Recip-Sphere)	_	Efficiency (MMBtu/100-MMBtu)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4534
	24-S&T_High (Short-Recip-Sphere)	_	Pipeline Length (mi/)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4535
	24-S&T_High (Short-Recip-Sphere)	_	H2 Consumption Per Km (MMBtu/100-MMBtu * km)		ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4536
4541	24-S&T_High (Short-Recip-Sphere)	2045_H2	O2 Percent (scf/100-scf)	15	ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4538

5. Activity Data

	А	С	D	E	F	
1						
2	Tab Contents					
	This workbook contains select tabs (ir	ncluding this	one) from a proprietary Stantec calculation tool. T	nis data is copied		
	from "ALP1_GHG_S&T_1_DataPrep_SoCalGas", "1. Data_Prep_S&T" tab. The input data in this tab was processed					
3	through the function in "3.1 EQ S&T"	to produce	the results in "4. Calculations".			
	In this workbook, the terms "Low", "N	/lid", and "F	ligh" correspond to the "Conservative", "Moderate"	, and "Ambitiou	S"	
4	market scenarios.					
5		_				
6	Equipment ID	Fuel Type	Parameter	Value	Reference	
4542	24-S&T_High (Short-Recip-Sphere)	2045_H2	H2 N2O EF (ppm/)		2 ALP1_GHG_S&T_1_DataPrep_SoCalGas.xlsx, 1. Data_Prep_S&T, Cell AY4539	

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Emissions are calculated using the following equation(s):

Stored Hydrogen (kg) = Hydrogen (MMBtu) x % H2 Stored (scf/100-scf) ÷ HHV-lb H2 (Btu/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Conv (lb-kg) (lb/kg)

H2 for Storage Compression (MMBtu) = Stored H2 (kg) x Compression Energy (MJ/kg) x Conv (J-MJ) (J/MJ) ÷ Conv (Btu-J) (J/Btu) ÷ Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Efficiency (MMBtu/100-MMBtu)

H2 for Transmission Compression (MMBtu) = Hydrogen (MMBtu) x Pipeline Length (mi) x Conv (km-mi) (km/mi) x H2 Consumption Per Km (MMBtu/100-MMBtu * km)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

100%-H2 N2O EF (MT/MMBtu) = H2 N2O EF (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Storage Compressor N2O (MT N2O) = Storage Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Transmission Compressor N2O (MT N2O) = Transmission Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Overall N2O (MT N2O) = Storage Compressor N2O (MT N2O) + Transmission Compressor N2O (MT N2O)

Storage Compressor GHG (MT CO2e) = Storage Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Transmission Compressor GHG (MT CO2e) = Transmission Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Overall GHG (MT CO2e) = Overall N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Where:

Hydrogen (MMBtu/) = Annual hydrogen demand

% H2 Stored (scf/100-scf) = Percent of annual hydrogen demand that is stored

Compression Energy (MJ/kg) = Energy required for compression (varies by storage-scenario)

Efficiency (MMBtu/100-MMBtu) = Combustion efficiency (varies by compressor-drive scenario)

Pipeline Length (mi/) = Transmission distance

H2 Consumption Per Km (MMBtu/100-MMBtu * km) = Hydrogen consumption per unit of transmission distance

H2 N2O EF (ppm/) = Hydrogen N2O emission factor

O2 Percent (scf/100-scf = Combustion oxygen percent (for equipment category)

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Table 1. S&T Calculation Inputs

Parameter	Value	Units	Resource
Hydrogen	102,244,522.45	MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1606
% H2 Stored	13.83	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1607
Compression Energy	14.00	MJ/kg	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1608
Efficiency	51.90	MMBtu/100- MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1609
Pipeline Length	450.00	mi	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1610
H2 Consumption Per Km	0.009333	MMBtu/(100- MMBtu * km)	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1611
Correction 100%-H2 Ratio	1.370000	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
H2 N2O EF	2.000000	ppm	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1614
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (Btu-J)	1,055.06	J/Btu	https://www.unitconverters.net/energy /joule-to-btu-it.htm
Conv (J-MJ)	1,000,000.00	J/MJ	

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Parameter	Value	Units	Resource
Conv (km-mi)	1.609344	km/mi	https://www.unitconverters.net/length/km-to-miles.htm
Conv (Conc-ppm)	1,000,000.000000	scf-ppm/scf	https://www.omnicalculator.com/conv ersion/ppm
Conv (lb-ton)	2,000.000000	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
Conv (lb-kg)	2.205000	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (kg-MT)	1,000.000000	kg/MT	
O2 Percent	15.000000	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1613
O2 Correction	3.542373	scf/scf	Calculated: 20.9/(20.9 - O2 percent)
Molar Volume @ 68 F	385.220000	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
Specific Weight H2	364.000000	scf/lb	Jahnke, 1993. Appendix A.
Fd (H2 @ 68 F)	5,975.049245	scf/MMBtu	Calculated Below
GWP N2O	273.000000	MT CO2e/MT N2O	IPCC AR6
MW (N2O)	44.010000	lb/pmole	
Stored H2	105,254,196.04	kg	Calculated Below
Storage Compressor H2	2,691,067.834135	MMBtu	Calculated Below
Transmission Compressor H2	6,910,957.567000	MMBtu	Calculated Below
100%-H2 N2O EF	0.000002	MT N2O/MMBtu	Calculated Below

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Parameter	Value	Units	Resource
Storage Compressor N2O	5.902342	MT N2O	Calculated Below
Transmission Compressor N2O	15.157861	MT N2O	Calculated Below
Overall N2O	21.060203	MT N2O	Calculated Below

Stored Hydrogen (kg) = 102,244,522.450196 (MMBtu) x 13.8282702 (scf/100-scf) \div 60,920.0 (Btu/lb) x 1,000,000.0 (Btu/MMBtu) \div 2.205 (lb/kg) = 105,254,196.040634 (kg)

H2 for Storage Compression (MMBtu) = 105,254,196.040634 (kg) x 14.0 (MJ/kg) x 1,000,000.0 (J/MJ) ÷ 1,055.0558526 (J/Btu) ÷ 1,000,000.0 (Btu/MMBtu) ÷ 51.9 (MMBtu/100-MMBtu) = 2,691,067.8341354 (MMBtu)

H2 for Transmission Compression (MMBtu) = 102,244,522.450196 (MMBtu) x 450.0 (mi) x 1.609344 (km/mi) x 0.0093333 (MMBtu/100-MMBtu * km) = 6,910,957.5669997 (MMBtu)

Fd (H2 @ 68 F) (scf/MMBtu) = 364 (scf/lb) x 1,000,000 (Btu/MMBtu) ÷ 60,920 (Btu/lb) = 5975 (scf/MMBtu)

100%-H2 N2O EF (MT/MMBtu) = $2.0 \text{ (ppm)} \div 1,000,000.0 \text{ (scf-ppm/scf)} \div 385.22 \text{ (scf/pmole)} x 44.01 \text{ (lb/pmole)} x 5,975.0492449 \text{ (scf/MMBtu)} x 3.5423729 \text{ (scf/scf)} \div 2.205 \text{ (lb/kg)} \div 1,000.0 \text{ (kg/MT)} = 0.0000022 \text{ (MT/MMBtu)}$

Storage Compressor N2O (MT N2O) = 2,691,067.8341354 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 5.9023418 (MT N2O)

Transmission Compressor N2O (MT N2O) = 6,910,957.5669997 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 15.1578615 (MT N2O)

Overall N2O (MT N2O) = 5.9023418 (MT N2O) + 15.1578615 (MT N2O) = 21.0602032 (MT N2O)

Storage Compressor GHG (MT CO2e) = 5.9023418 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 1,611.339299 (MT CO2e)

Transmission Compressor GHG (MT CO2e) = 15.1578615 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 4,138.0961788 (MT CO2e)

Overall GHG (MT CO2e) = 21.0602032 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 5,749.4354777 (MT CO2e)

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Emissions are calculated using the following equation(s):

Stored Hydrogen (kg) = Hydrogen (MMBtu) x % H2 Stored (scf/100-scf) ÷ HHV-lb H2 (Btu/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Conv (lb-kg) (lb/kg)

H2 for Storage Compression (MMBtu) = Stored H2 (kg) x Compression Energy (MJ/kg) x Conv (J-MJ) (J/MJ) ÷ Conv (Btu-J) (J/Btu) ÷ Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Efficiency (MMBtu/100-MMBtu)

H2 for Transmission Compression (MMBtu) = Hydrogen (MMBtu) x Pipeline Length (mi) x Conv (km-mi) (km/mi) x H2 Consumption Per Km (MMBtu/100-MMBtu * km)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

100%-H2 N2O EF (MT/MMBtu) = H2 N2O EF (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Storage Compressor N2O (MT N2O) = Storage Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Transmission Compressor N2O (MT N2O) = Transmission Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Overall N2O (MT N2O) = Storage Compressor N2O (MT N2O) + Transmission Compressor N2O (MT N2O)

Storage Compressor GHG (MT CO2e) = Storage Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Transmission Compressor GHG (MT CO2e) = Transmission Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Overall GHG (MT CO2e) = Overall N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Where:

Hydrogen (MMBtu/) = Annual hydrogen demand

% H2 Stored (scf/100-scf) = Percent of annual hydrogen demand that is stored

Compression Energy (MJ/kg) = Energy required for compression (varies by storage-scenario)

Efficiency (MMBtu/100-MMBtu) = Combustion efficiency (varies by compressor-drive scenario)

Pipeline Length (mi/) = Transmission distance

H2 Consumption Per Km (MMBtu/100-MMBtu * km) = Hydrogen consumption per unit of transmission distance

H2 N2O EF (ppm/) = Hydrogen N2O emission factor

O2 Percent (scf/100-scf = Combustion oxygen percent (for equipment category)

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Table 1. S&T Calculation Inputs

Parameter	Value	Units	Resource
Hydrogen	102,244,522.45	MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1795
% H2 Stored	13.83	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1796
Compression Energy	4.00	MJ/kg	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1797
Efficiency	51.90	MMBtu/100- MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1798
Pipeline Length	450.00	mi	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1799
H2 Consumption Per Km	0.009333	MMBtu/(100- MMBtu * km)	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1800
Correction 100%-H2 Ratio	1.370000	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
H2 N2O EF	2.000000	ppm	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1803
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (Btu-J)	1,055.06	J/Btu	https://www.unitconverters.net/energy /joule-to-btu-it.htm
Conv (J-MJ)	1,000,000.00	J/MJ	

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Parameter	Value	Units	Resource
Conv (km-mi)	1.609344	km/mi	https://www.unitconverters.net/length/km-to-miles.htm
Conv (Conc-ppm)	1,000,000.000000	scf-ppm/scf	https://www.omnicalculator.com/conv ersion/ppm
Conv (lb-ton)	2,000.000000	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
Conv (lb-kg)	2.205000	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (kg-MT)	1,000.000000	kg/MT	
O2 Percent	15.000000	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1802
O2 Correction	3.542373	scf/scf	Calculated: 20.9/(20.9 - O2 percent)
Molar Volume @ 68 F	385.220000	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/fuels-higher-calorific-values-d_169.html
Specific Weight H2	364.000000	scf/lb	Jahnke, 1993. Appendix A.
Fd (H2 @ 68 F)	5,975.049245	scf/MMBtu	Calculated Below
GWP N2O	273.000000	MT CO2e/MT N2O	IPCC AR6
MW (N2O)	44.010000	lb/pmole	
Stored H2	105,254,196.04	kg	Calculated Below
Storage Compressor H2	768,876.524039	MMBtu	Calculated Below
Transmission Compressor H2	6,910,957.567000	MMBtu	Calculated Below
100%-H2 N2O EF	0.000002	MT N2O/MMBtu	Calculated Below

10-S&T_Mid (Long-Turbine-Sphere) 2035_H2 10/15/2024

Parameter	Value	Units	Resource
Storage Compressor N2O	1.686383	MT N2O	Calculated Below
Transmission Compressor N2O	15.157861	MT N2O	Calculated Below
Overall N2O	16.844245	MT N2O	Calculated Below

Stored Hydrogen (kg) = 102,244,522.450196 (MMBtu) x 13.8282702 (scf/100-scf) \div 60,920.0 (Btu/lb) x 1,000,000.0 (Btu/MMBtu) \div 2.205 (lb/kg) = 105,254,196.040634 (kg)

H2 for Storage Compression (MMBtu) = 105,254,196.040634 (kg) x 4.0 (MJ/kg) x 1,000,000.0 (J/MJ) \div 1,055.0558526 (J/Btu) \div 1,000,000.0 (Btu/MMBtu) \div 51.9 (MMBtu/100-MMBtu) = 768,876.5240387 (MMBtu)

H2 for Transmission Compression (MMBtu) = 102,244,522.450196 (MMBtu) x 450.0 (mi) x 1.609344 (km/mi) x 0.0093333 (MMBtu/100-MMBtu * km) = 6,910,957.5669997 (MMBtu)

Fd (H2 @ 68 F) (scf/MMBtu) = 364 (scf/lb) x 1,000,000 (Btu/MMBtu) ÷ 60,920 (Btu/lb) = 5975 (scf/MMBtu)

100%-H2 N2O EF (MT/MMBtu) = 2.0 (ppm) ÷ 1,000,000.0 (scf-ppm/scf) ÷ 385.22 (scf/pmole) x 44.01 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 3.5423729 (scf/scf) ÷ 2.205 (lb/kg) ÷ 1,000.0 (kg/MT) = 0.0000022 (MT/MMBtu)

Storage Compressor N2O (MT N2O) = 768,876.5240387 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 1.6863834 (MT N2O)

Transmission Compressor N2O (MT N2O) = 6,910,957.5669997 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 15.1578615 (MT N2O)

Overall N2O (MT N2O) = 1.6863834 (MT N2O) + 15.1578615 (MT N2O) = 16.8442448 (MT N2O)

Storage Compressor GHG (MT CO2e) = 1.6863834 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 460.3826568 (MT CO2e)

Transmission Compressor GHG (MT CO2e) = 15.1578615 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 4,138.0961788 (MT CO2e)

Overall GHG (MT CO2e) = 16.8442448 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 4,598.4788356 (MT CO2e)

11-S&T_Mid (Long-Recip-UG) 2035_H2 10/15/2024

Emissions are calculated using the following equation(s):

Stored Hydrogen (kg) = Hydrogen (MMBtu) x % H2 Stored (scf/100-scf) ÷ HHV-lb H2 (Btu/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Conv (lb-kg) (lb/kg)

H2 for Storage Compression (MMBtu) = Stored H2 (kg) x Compression Energy (MJ/kg) x Conv (J-MJ) (J/MJ) ÷ Conv (Btu-J) (J/Btu) ÷ Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Efficiency (MMBtu/100-MMBtu)

H2 for Transmission Compression (MMBtu) = Hydrogen (MMBtu) x Pipeline Length (mi) x Conv (km-mi) (km/mi) x H2 Consumption Per Km (MMBtu/100-MMBtu * km)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

100%-H2 N2O EF (MT/MMBtu) = H2 N2O EF (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Storage Compressor N2O (MT N2O) = Storage Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Transmission Compressor N2O (MT N2O) = Transmission Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Overall N2O (MT N2O) = Storage Compressor N2O (MT N2O) + Transmission Compressor N2O (MT N2O)

Storage Compressor GHG (MT CO2e) = Storage Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Transmission Compressor GHG (MT CO2e) = Transmission Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Overall GHG (MT CO2e) = Overall N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Where:

Hydrogen (MMBtu/) = Annual hydrogen demand

% H2 Stored (scf/100-scf) = Percent of annual hydrogen demand that is stored

Compression Energy (MJ/kg) = Energy required for compression (varies by storage-scenario)

Efficiency (MMBtu/100-MMBtu) = Combustion efficiency (varies by compressor-drive scenario)

Pipeline Length (mi/) = Transmission distance

H2 Consumption Per Km (MMBtu/100-MMBtu * km) = Hydrogen consumption per unit of transmission distance

H2 N2O EF (ppm/) = Hydrogen N2O emission factor

O2 Percent (scf/100-scf = Combustion oxygen percent (for equipment category)

11-S&T_Mid (Long-Recip-UG) 2035_H2 10/15/2024

Table 1. S&T Calculation Inputs

Parameter	Value	Units	Resource
Hydrogen	102,244,522.45	MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1984
% H2 Stored	13.83	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1985
Compression Energy	14.00	MJ/kg	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1986
Efficiency	60.30	MMBtu/100- MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1987
Pipeline Length	450.00	mi	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1988
H2 Consumption Per Km	0.009333	MMBtu/(100- MMBtu * km)	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1989
Correction 100%-H2 Ratio	1.370000	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
H2 N2O EF	2.000000	ppm	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1992
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (Btu-J)	1,055.06	J/Btu	https://www.unitconverters.net/energy /joule-to-btu-it.htm
Conv (J-MJ)	1,000,000.00	J/MJ	

11-S&T_Mid (Long-Recip-UG) 2035_H2 10/15/2024

Parameter	Value	Units	Resource
Conv (km-mi)	1.609344	km/mi	https://www.unitconverters.net/length/km-to-miles.htm
Conv (Conc-ppm)	1,000,000.000000	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-ton)	2,000.000000	lb/ton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
Conv (lb-kg)	2.205000	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (kg-MT)	1,000.000000	kg/MT	
O2 Percent	15.000000	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY1991
O2 Correction	3.542373	scf/scf	Calculated: 20.9/(20.9 - O2 percent)
Molar Volume @ 68 F	385.220000	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/f uels-higher-calorific-values- d_169.html
Specific Weight H2	364.000000	scf/lb	Jahnke, 1993. Appendix A.
Fd (H2 @ 68 F)	5,975.049245	scf/MMBtu	Calculated Below
GWP N2O	273.000000	MT CO2e/MT N2O	IPCC AR6
MW (N2O)	44.010000	lb/pmole	
Stored H2	105,254,196.04	kg	Calculated Below
Storage Compressor H2	2,316,192.712962	MMBtu	Calculated Below
Transmission Compressor H2	6,910,957.567000	MMBtu	Calculated Below
100%-H2 N2O EF	0.000002	MT N2O/MMBtu	Calculated Below

11-S&T_Mid (Long-Recip-UG) 2035_H2 10/15/2024

Parameter	Value	Units	Resource
Storage Compressor N2O	5.080125	MT N2O	Calculated Below
Transmission Compressor N2O	15.157861	MT N2O	Calculated Below
Overall N2O	20.237986	MT N2O	Calculated Below

Stored Hydrogen (kg) = 102,244,522.450196 (MMBtu) x 13.8282702 (scf/100-scf) \div 60,920.0 (Btu/lb) x 1,000,000.0 (Btu/MMBtu) \div 2.205 (lb/kg) = 105,254,196.040634 (kg)

H2 for Storage Compression (MMBtu) = 105,254,196.040634 (kg) x 14.0 (MJ/kg) x 1,000,000.0 (J/MJ) ÷ 1,055.0558526 (J/Btu) ÷ 1,000,000.0 (Btu/MMBtu) ÷ 60.3 (MMBtu/100-MMBtu) = 2,316,192.7129623 (MMBtu)

H2 for Transmission Compression (MMBtu) = 102,244,522.450196 (MMBtu) x 450.0 (mi) x 1.609344 (km/mi) x 0.0093333 (MMBtu/100-MMBtu * km) = 6,910,957.5669997 (MMBtu)

Fd (H2 @ 68 F) (scf/MMBtu) = 364 (scf/lb) x 1,000,000 (Btu/MMBtu) ÷ 60,920 (Btu/lb) = 5975 (scf/MMBtu)

100%-H2 N2O EF (MT/MMBtu) = 2.0 (ppm) ÷ 1,000,000.0 (scf-ppm/scf) ÷ 385.22 (scf/pmole) x 44.01 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 3.5423729 (scf/scf) ÷ 2.205 (lb/kg) ÷ 1,000.0 (kg/MT) = 0.0000022 (MT/MMBtu)

Storage Compressor N2O (MT N2O) = 2,316,192.7129623 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 5.080125 (MT N2O)

Transmission Compressor N2O (MT N2O) = 6,910,957.5669997 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 15.1578615 (MT N2O)

Overall N2O (MT N2O) = 5.080125 (MT N2O) + 15.1578615 (MT N2O) = 20.2379865 (MT N2O)

Storage Compressor GHG (MT CO2e) = 5.080125 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 1,386.874123 (MT CO2e)

Transmission Compressor GHG (MT CO2e) = 15.1578615 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 4,138.0961788 (MT CO2e)

Overall GHG (MT CO2e) = 20.2379865 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 5,524.9703018 (MT CO2e)

12-S&T_Mid (Long-Recip-Sphere) 2035_H2 10/15/2024

Emissions are calculated using the following equation(s):

Stored Hydrogen (kg) = Hydrogen (MMBtu) x % H2 Stored (scf/100-scf) ÷ HHV-lb H2 (Btu/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Conv (lb-kg) (lb/kg)

H2 for Storage Compression (MMBtu) = Stored H2 (kg) x Compression Energy (MJ/kg) x Conv (J-MJ) (J/MJ) ÷ Conv (Btu-J) (J/Btu) ÷ Conv (Btu-MMBtu) (Btu/MMBtu) ÷ Efficiency (MMBtu/100-MMBtu)

H2 for Transmission Compression (MMBtu) = Hydrogen (MMBtu) x Pipeline Length (mi) x Conv (km-mi) (km/mi) x H2 Consumption Per Km (MMBtu/100-MMBtu * km)

Fd (H2 @ 68 F) (scf/MMBtu) = Specific Weight H2 (scf/lb) x Conv (Btu-MMBtu) (Btu/MMBtu) ÷ HHV-lb H2 (Btu/lb)

100%-H2 N2O EF (MT/MMBtu) = H2 N2O EF (ppm) ÷ Conv (Conc-ppm) (scf-ppm/scf) ÷ Molar Volume @ 68 F (scf/pmole) x MW (N2O) (lb/pmole) x Fd (H2 @ 68 F) (scf/MMBtu) x O2 Correction (scf/scf) ÷ Conv (lb-kg) (lb/kg) ÷ Conv (kg-MT) (kg/MT)

Storage Compressor N2O (MT N2O) = Storage Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Transmission Compressor N2O (MT N2O) = Transmission Compressor H2 (MMBtu) x 100%-H2 N2O EF (MT N2O/MMBtu)

Overall N2O (MT N2O) = Storage Compressor N2O (MT N2O) + Transmission Compressor N2O (MT N2O)

Storage Compressor GHG (MT CO2e) = Storage Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Transmission Compressor GHG (MT CO2e) = Transmission Compressor N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Overall GHG (MT CO2e) = Overall N2O (MT N2O) x GWP N2O (MT CO2e/MT N2O)

Where:

Hydrogen (MMBtu/) = Annual hydrogen demand

% H2 Stored (scf/100-scf) = Percent of annual hydrogen demand that is stored

Compression Energy (MJ/kg) = Energy required for compression (varies by storage-scenario)

Efficiency (MMBtu/100-MMBtu) = Combustion efficiency (varies by compressor-drive scenario)

Pipeline Length (mi/) = Transmission distance

H2 Consumption Per Km (MMBtu/100-MMBtu * km) = Hydrogen consumption per unit of transmission distance

H2 N2O EF (ppm/) = Hydrogen N2O emission factor

O2 Percent (scf/100-scf = Combustion oxygen percent (for equipment category)

12-S&T_Mid (Long-Recip-Sphere) 2035_H2 10/15/2024

Table 1. S&T Calculation Inputs

Parameter	Value	Units	Resource
Hydrogen	102,244,522.45	MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2173
% H2 Stored	13.83	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2174
Compression Energy	4.00	MJ/kg	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2175
Efficiency	60.30	MMBtu/100- MMBtu	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2176
Pipeline Length	450.00	mi	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2177
H2 Consumption Per Km	0.009333	MMBtu/(100- MMBtu * km)	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2178
Correction 100%-H2 Ratio	1.370000	ppm/ppm	https://research.gatech.edu/sites/defa ult/files/inline- files/gt_epri_nox_emission_h2_short_ paper.pdf
H2 N2O EF	2.000000	ppm	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2181
Conv (Btu-MMBtu)	1,000,000.00	Btu/MMBtu	http://www.endmemo.com/sconvert/bt ummbtu.php#:~:text=Btu%E2%86%9 4MMBtu%201%20MMBtu%20%3D% 201000000%20Btu
Conv (lb-kg)	2.21	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (Btu-J)	1,055.06	J/Btu	https://www.unitconverters.net/energy /joule-to-btu-it.htm
Conv (J-MJ)	1,000,000.00	J/MJ	

12-S&T_Mid (Long-Recip-Sphere) 2035_H2 10/15/2024

Parameter	Value	Units	Resource
Conv (km-mi)	1.609344	km/mi	https://www.unitconverters.net/length/km-to-miles.htm
Conv (Conc-ppm)	1,000,000.000000	scf-ppm/scf	https://www.omnicalculator.com/conversion/ppm
Conv (lb-ton)	2,000.000000	lbton	https://www.unitconverters.net/weight- and-mass/ton-to-lbs.htm
Conv (lb-kg)	2.205000	lb/kg	https://www.unitconverters.net/weight- and-mass/kg-to-lbs.htm
Conv (kg-MT)	1,000.000000	kg/MT	
O2 Percent	15.000000	scf/100-scf	ALP1_GHG_S&T_1_DataPrep_SoCa IGas.xlsx, 1. Data_Prep_S&T, Cell AY2180
O2 Correction	3.542373	scf/scf	Calculated: 20.9/(20.9 - O2 percent)
Molar Volume @ 68 F	385.220000	scf/pmole	https://stantec.sharepoint.com/sites/At mosphericSciences- ES/Shared%20Documents/Shared%2 0Content%20and%20Examples/Emis sions%20Management%20Tool/Calc ulation%20Sheets%20for%20Import/ EQ%20Molar%20Volume.xlsm
HHV-lb H2	60,920.00	Btu/lb	https://www.engineeringtoolbox.com/fuels-higher-calorific-values-d_169.html
Specific Weight H2	364.000000	scf/lb	Jahnke, 1993. Appendix A.
Fd (H2 @ 68 F)	5,975.049245	scf/MMBtu	Calculated Below
GWP N2O	273.000000	MT CO2e/MT N2O	IPCC AR6
MW (N2O)	44.010000	lb/pmole	
Stored H2	105,254,196.04	kg	Calculated Below
Storage Compressor H2	661,769.346561	MMBtu	Calculated Below
Transmission Compressor H2	6,910,957.567000	MMBtu	Calculated Below
100%-H2 N2O EF	0.000002	MT N2O/MMBtu	Calculated Below

12-S&T_Mid (Long-Recip-Sphere) 2035_H2 10/15/2024

Parameter	Value	Units	Resource
Storage Compressor N2O	1.451464	MT N2O	Calculated Below
Transmission Compressor N2O	15.157861	MT N2O	Calculated Below
Overall N2O	16.609326	MT N2O	Calculated Below

Stored Hydrogen (kg) = 102,244,522.450196 (MMBtu) x 13.8282702 (scf/100-scf) \div 60,920.0 (Btu/lb) x 1,000,000.0 (Btu/MMBtu) \div 2.205 (lb/kg) = 105,254,196.040634 (kg)

H2 for Storage Compression (MMBtu) = 105,254,196.040634 (kg) x 4.0 (MJ/kg) x 1,000,000.0 (J/MJ) \div 1,055.0558526 (J/Btu) \div 1,000,000.0 (Btu/MMBtu) \div 60.3 (MMBtu/100-MMBtu) = 661,769.3465607 (MMBtu)

H2 for Transmission Compression (MMBtu) = 102,244,522.450196 (MMBtu) x 450.0 (mi) x 1.609344 (km/mi) x 0.0093333 (MMBtu/100-MMBtu * km) = 6,910,957.5669997 (MMBtu)

Fd (H2 @ 68 F) (scf/MMBtu) = 364 (scf/lb) x 1,000,000 (Btu/MMBtu) ÷ 60,920 (Btu/lb) = 5975 (scf/MMBtu)

100%-H2 N2O EF (MT/MMBtu) = 2.0 (ppm) ÷ 1,000,000.0 (scf-ppm/scf) ÷ 385.22 (scf/pmole) x 44.01 (lb/pmole) x 5,975.0492449 (scf/MMBtu) x 3.5423729 (scf/scf) ÷ 2.205 (lb/kg) ÷ 1,000.0 (kg/MT) = 0.0000022 (MT/MMBtu)

Storage Compressor N2O (MT N2O) = 661,769.3465607 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 1.4514643 (MT N2O)

Transmission Compressor N2O (MT N2O) = 6,910,957.5669997 (MMBtu) x 0.0000022 (MT N2O/MMBtu) = 15.1578615 (MT N2O)

Overall N2O (MT N2O) = 1.4514643 (MT N2O) + 15.1578615 (MT N2O) = 16.6093257 (MT N2O)

Storage Compressor GHG (MT CO2e) = 1.4514643 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 396.2497494 (MT CO2e)

Transmission Compressor GHG (MT CO2e) = 15.1578615 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 4,138.0961788 (MT CO2e)

Overall GHG (MT CO2e) = 16.6093257 (MT N2O) x 273.0 (MT CO2e/MT N2O) = 4,534.3459282 (MT CO2e)