Application No.: A.22-03-_____
Exhibit No.: _____
Witness: Darren Hanway and Clinton Chien

Application of SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) for Approval of 2024-2031 Energy Efficiency Business Plan and 2024-2027 Portfolio Plan	Application 22-03_____ (Filed March 4, 2022)

PREPARED DIRECT TESTIMONY OF

DARREN HANWAY AND CLINTON CHIEN

ON BEHALF OF

SOUTHERN CALIFORNIA GAS COMPANY

EXHIBIT 2

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

March 4, 2022

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DIRECT TESTIMONY OF DARREN HANWAY AND CLINTON CHEN

I. PORTFOLIO SUMMARY

This portfolio filing provides Southern California Gas Company's (SoCalGas) detailed plan for portfolio administration for program years 2024-2027, in compliance with California Public Utilities Commission (CPUC or Commission) orders,[1] and requests approval up front for cost recovery for the four-year cycle. This filing compliments a suite of initiatives and proposals that SoCalGas is pursuing outside of the Energy Efficiency proceeding to decarbonize the gas system, including but not limited to those described in SoCalGas's climate commitment ASPIRE 2045,[2] the recent Angeles Link proposal to build the nation's largest green hydrogen infrastructure system,[3] and deploying leading edge fugitive methane abatement programs.[4] As presented in SoCalGas's Strategic Business Plan (Business Plan), SoCalGas's mission is to offer a suite of energy efficiency solutions that:

- Incorporate the best available technologies and services valued by customers;
- Contribute to the achievement of California's energy efficiency goals; and
- Align with the State's energy efficiency policies - including a doubling of energy efficiency in California by 2030.

SoCalGas strives to provide cost-effective, customer-centric solutions that will ultimately support the economic viability of its customers and advance California's decarbonization policies. Since California enacted Assembly Bill 32, the California Global Warming Solutions Act of 2006, SoCalGas has determinedly promoted energy efficiency solutions across all customer sectors. Senate Bill 350, the Clean Energy and Pollution Reduction Act of 2015, seeks

[1] D. 21-05-031, OP 5, 6, and 8.
[2] SoCalGas Climate Commitment Aspire 2045, *available at* https://www.socalgas.com/sites/default/files/2021-03/SoCalGas_Climate_Commitment.pdf; *see also* SoCalGas Sustainability Strategy Aspire 2045, *available at* SoCalGas_Sustainability_Strategy-final.pdf.
[3] Application of Southern California Gas Company (U904G) for Authority to Establish a Memorandum Account for the Angeles Link Project, February 17, 2022, *available at* https://www.socalgas.com/sites/default/files/A22-02-SOCALGAS-Angeles_Link_Memorandum_Account_Application.pdf;
SoCalGas Sustainability Strategy Aspire 2045, *available at* https://www.socalgas.com/sites/default/files/2022-01/SoCalGas_Sustainability_Strategy-final.pdf.[5]Over the past 5 years, SoCalGas's energy efficiency programs have led the nation in achieving over 228 million in annual therm savings for its customers. In 2020, SoCalGas customers realized more than 46.5 million in net therms savings, which represents 137% of the SoCalGas energy efficiency goal established by the CPUC in D. 17-09-025.

to double energy efficiency by 2030 and address the needs of disadvantaged communities. SoCalGas has responded accordingly with expanded energy efficiency efforts resulting in a significant increase in energy efficiency adoption with its customers, including targeted efforts directed at Disadvantaged Communities.[5] With this 2024-2027 Portfolio Plan (Portfolio Plan), SoCalGas will strengthen its commitment to energy efficiency and decarbonization over the next several years to help advance California energy policies. More specifically, SoCalGas will continue to be a leader in delivering innovative energy efficiency programs that customers value, protect the environment, stimulate the economy, and make a difference in the communities served.

SoCalGas's energy efficiency portfolio will accelerate California toward achieving its clean energy goals through innovative and comprehensive customer-centric decarbonization solutions.

SoCalGas's vision integrates the ideals of innovation, partnership, and customer-centric approaches to assist customers and their energy efficiency decisions. SoCalGas will realize its vision across all customer sectors through a concerted effort across the Resource Acquisition, Market Support, and Equity program segments as presented in the Business Plan. The Business Plan lays out the strategies and tactics developed for achieving and exceeding SoCalGas's energy efficiency goals.[6] The Business Plan also outlines sector-level goals and strategies to reduce identified market barriers and increase customer adoption of energy efficiency solutions. As such, the following overarching principles help guide SoCalGas's energy efficiency vision:

- Deliver energy efficiency solutions that enable greater system reliability, resiliency, affordability, and sustainability.
- Provide access to affordable and equitable energy efficiency and decarbonization solutions for all customers with a particular focus on addressing inequity in Disadvantaged Communities.
- Invest long-term in education, training, and outreach to build successful market support partnerships for accelerating energy efficiency adoption.

SoCalGas's Portfolio Plan includes increased funding for: successful innovative third-party programs that increase resource acquisition levels; innovative approaches to support the

[5]Over the past 5 years, SoCalGas's energy efficiency programs have led the nation in achieving over 228 million in annual therm savings for its customers. In 2020, SoCalGas customers realized more than 46.5 million in net therms savings, which represents 137% of the SoCalGas energy efficiency goal established by the CPUC in D. 17-09-025.

[6] D. 21-09-037, p.21

energy efficiency market; and improved energy efficiency opportunities for equity-defined customers in safe and affordable ways. SoCalGas will expand its innovative partnership approach with local electric and water utilities, and other organizations to efficiently provide expanded market support and energy and water efficiency solutions for its customers.

A. Key Metrics and Outcomes

1. Proposed Outcomes

To gauge sector progress towards achieving the desired sector outcomes, the Business Plan proposes extending and enhancing the CPUC's current portfolio, sector, and segment metrics. Each sector chapter in the Business Plan identifies key goals and expected outcomes. In most cases, the desired outcome is expected beyond the near and mid-term implementation horizon. To properly monitor progress towards the desired outcome over time, the metrics will rely on data currently collected, tracked, and verified as part of the program administrator's data requirements (*e.g.*, energy savings, customer participation, etc.). This approach improves the accuracy and timeliness of metric tracking for both the portfolio administrator and the Commission while keeping the monitoring costs to reasonable levels. Sector metrics and targets may change over the four-year Business Plan as SoCalGas and its program implementers learn more about market characteristics and responsiveness to the various energy efficiency programs.

2. Portfolio Goals and Performance Metrics

To maintain consistency with the CPUC-adopted portfolio and sector-level metrics, SoCalGas proposes to enhance the current equity segment metrics. SoCalGas offers metrics tied directly to increasing energy efficiency adoption, improving energy affordability, and reducing customer bills. Customers in the equity segment face various market barriers such as split-incentives, lack of awareness, and high first cost of energy efficiency. SoCalGas proposes focusing programs on these market barriers and monitoring progress in reducing these barriers through the CPUC's sector level metrics as presented in its entirety in Appendix A. Additionally, the California Energy Efficiency Coordinating Committee (CAEECC) recently released additional metrics to guide the equity and market support segments which are also presented in Appendix A.[7] SoCalGas will be tracking progress towards the newly release equity

[7] CAEECC Equity and Market Support Sector Working Group Reports, *available at* https://www.caeecc.org/market-support-metrics-wg and https://www.caeecc.org/equity-metrics-working-group-meeting.

and market support segments in program years 2022 and 2023 and will establish targets towards them for program year 2024-2027 at a later date.

B. Portfolio Strategies

1. Strategies for Use of Existing and New Methods for Savings Forecasting and Quantification

SoCalGas is committed to applying all CPUC-approved energy savings methodologies to support accurate energy savings claims for its entire portfolio. SoCalGas will actively collaborate with the CPUC and other stakeholders to advance energy savings methodologies while improving and expanding existing measure packages to provide customers with more energy efficiency solutions. To accomplish this, SoCalGas will:

- Increase the use of normalized metered energy consumption (NMEC) methodologies that can rely on meter-energy savings and support pay-for-performance customer incentives and implementer compensation.
- Expand the application of Strategic Energy Management (SEM) solutions in the industrial sector while extending SEM into commercial, public, and agricultural applications, where feasible.
- Create new and renewed energy efficiency measure packages (i.e., workpapers) through California Technical Forum (CalTF) to expand customer energy efficiency opportunities.
- Collaborate with the CPUC and stakeholders on supporting CalTF's Electronic Technical Manual (eTRM).

2. Strategy for Incorporating Low Global Warming Potential Refrigerants

Global Warming Potential (GWP) measures the impact of climate pollutants.[8] Refrigerants today are often thousands of times more polluting than carbon dioxide (CO_2), whereas methane has a GWP of 26-36 with a shorter lifetime than refrigerants, of about ten years.[9] GWP refrigerants are often not used in natural gas technologies. SoCalGas will inform customers of other low-GWP technologies in applications where refrigerants may be used. For example, a new emerging gas technology, residential gas absorption heat pump water heaters,

[8] The GWP was created to allow direct comparisons between different gases implicated in global warming. It measures how much energy one ton of a gas will absorb over a given period of time compared to one ton of CO2.
[9] EPA, Understanding Global Warming Potentials, *available at* Understanding Global Warming Potentials | US EPA.

does not use any harmful refrigerants. SoCalGas will create greater customer awareness of the detrimental effects of refrigerants on the climate and of alternate for no/low-GWP refrigerant solutions.

3. Strategies for Spurring Innovation

Innovation is the key to assertively achieving California's ambitious energy efficiency goals and advancing energy decarbonization. SoCalGas has a long history of innovative program design and approaches that have helped customers adopt more energy efficiency solutions. Most recently, SoCalGas introduced the first marketplace in the nation to offer on-demand residential microloans, enabling consumers, including customers with lower credit scores, to seamlessly purchase energy efficiency equipment online at below-market interest rates. SoCalGas will continue to innovate in all areas of the energy efficiency portfolio in program design, delivery, and administration in close collaboration with the third-party implementer community and other program administrators by:

- Procuring innovative program designs and delivery approaches from the energy efficiency implementer community
- Identifying new and renewed energy efficiency technologies and uses for customers
- Creating greater efficiencies in portfolio management through centralization and standardization
- Partnering with public agencies to promote incentive stacking opportunities and advance complementary policies (e.g., water efficiency, electric efficiency, emission reduction) targeted at shared customers
- Leveraging a trained and qualified workforce to install and maintain EE equipment in conjunction with utility services
- Promoting the benefits of the energy savings, water efficiency, and emission reductions nexus to customers

4. Strategies for Market Intervention and Energy Efficiency Adoption

Market (or program) intervention strategies will be deployed in each sector to realize the Business Plan's vision and achieve each of the sector's goals and objectives. Program designers will refine the strategies with innovative tactics to support SoCalGas's energy efficiency goals.

a. Market Intervention

All energy efficiency programs contribute in some way to reducing market barriers to achieve the desired, long-lasting market effects. For the last four decades, California has supported energy efficiency market intervention strategies, coupled with public policies and laws, that permanently reduce market barriers so customers can achieve higher levels of energy efficiency. In a transformed market, customers will naturally adopt higher levels of energy efficiency without the need for such market and government interventions.[10] The Portfolio Plan identifies sector-specific challenges along with corresponding goals and outcomes to identify the appropriate market strategies. Sector-specific strategies are presented that will likely reduce current market barriers.

Program delivery will rely on a combination of third-party delivered statewide and local programs. SoCalGas will supplement these programs with portfolio support to enable third-party program implementers and customers to work together on energy efficiency solutions. To aid in efficient program delivery, SoCalGas will offer: standard support services (*e.g.*, customer acquisition, engineering reviews, quality assurance, data analytics, etc.), utility on-bill financing; and optional utility support services, including trained and skilled represented labor to support residential and small business energy efficiency installations. SoCalGas also plans to continue providing rebate processing services, including a standard incentive offering when not available through other, more targeted energy efficiency programs. SoCalGas will continue implementing its award-winning energy center to facilitate local training and outreach to local contractors and retailers/distributors.

Quantifying energy savings accurately and effectively is critical to ensuring that energy efficiency investments provide a return to ratepayers and contributions to the State's clean energy goals. SoCalGas uses several methods to estimate energy savings and strives to apply the most effective method for each program and measure. In addition to using known-effective intervention strategies, SoCalGas will spur innovation with new measures and intervention strategies, including a new approach to behind-the-meter emissions mitigation that will reduce natural gas usage and redefine energy efficiency. A list of the primary intervention strategies is

[10] "Market transformation is not a label that uniquely identifies certain energy efficiency program designs to the exclusion of others. It is instead an objective that all energy-efficiency programs have at least a theoretical potential to achieve to varying degrees." Eto, J., Prahl, R., & Schlegel, J. (1996, July). A scoping study on energy efficiency market transformation by California utility DSM programs. *Energy & Environment Division, Earnest Orlando Lawrence Berkeley National Laboratory, University of Berkeley.* Retrieved from http://eaei.lbl.gov/sites/all/files/lbnl_-_39058.pdf

presented below. Details about each intervention strategy are shown in each sector chapter of the Portfolio Plan (Exhibit 2).

b. Market Intervention Strategies

Partnering

Partnership arrangements are intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.

Education & Training

Education and training interventions target customers and intermediaries such as contractors, distributors, trade associations, and government agencies. This intervention strengthens supply chains to increase the capability and motivation of market actors to supply energy-efficient products and/or services and improve the ability, capability, and motivation of market actors to perform and ensure quality installations that optimize energy efficiency savings.

Intelligent Outreach

Intelligent Outreach can assist customers in identifying energy efficiency opportunities and reduce program delivery costs. Intelligent Outreach uses energy consumption data, in concert with other sources, to effectively target and inform customers about energy efficiency opportunities within their homes and buildings. Through a multifaceted approach, primarily enabled by SoCalGas's advanced metering infrastructure (AMI), customers can use their energy usage data to understand and optimize their energy use. Using AMI data, program designers can efficiently target their programs' high potential customers.

Energy Audits

Energy audits assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery and segment-specific benchmarking, and provide deeper, comprehensive energy savings solutions. Many initial and higher-level audits can be performed remotely using AMI and other data, while comprehensive energy audits typically require on-site inspections.

Technical Assistance

Technical Assistance is an information strategy focused on educating and training key facility personnel on energy efficiency practices and providing supplemental assistance in energy efficiency project development and implementation for individual customer projects.

Customer Financial Incentives (Downstream)

The customer financial incentive intervention strategy is a suite of financial offerings for customers to reduce the high first cost barrier, a significant market barrier for most customers. In recognition of the varied preferences among customers for different financial solutions, the program strategy offers a menu of tactics. Incentive levels may vary to address locational issues, increase customer participation, or adjust for climate zones. Each tactic is intended to increase participation through simplified customer engagement within the overall customer incentive strategy while encouraging deeper, more comprehensive energy efficiency solutions, including permanent behavior modification. Although incentive-based strategies, like pay-for-performance, may be suited for more extensive energy efficiency projects, in many circumstances, a one-payment approach (*e.g.*, deemed and customized incentives) is very effective in motivating the customer to install energy efficiency equipment. SoCalGas will increase the use of tiered incentives that promote the highest efficient technologies to customers.

Mid/Upstream Financial Incentives

Downstream financial incentives and financing offerings are provided directly to customers. In some cases, it is more effective to target other market actors. Mid/upstream energy efficiency program interventions provide retailers/distributors/manufacturers incentives to reduce the retail cost of energy efficiency equipment, design manufactured commercial buildings, promote stocking of energy-efficient equipment, and inform contractors at the distributor level.

Operational and Maintenance

Operational and Maintenance provides customer engagement to reshape customer energy usage through operational-based solutions—influence customer operations and maintenance to energy consumption through various tactics such as retro-commissioning and strategic energy management.

Behavioral Modification

Behavioral Modification is a strategy to influence behavior change related to energy consumption in customers' homes and businesses through various tactics such as comparative energy usage information.

Emerging Technologies

Emerging technologies activities identify and screen potential technologies, assess them to validate performance and customer acceptance, perform in-situ demonstrations, gather

actionable information for use by energy efficiency programs, and publish the results of these activities.

Financing

The financing program strategy relies on various financing vehicles, including on/off bill financing and repayment solutions, to encourage customers to adopt deeper, more comprehensive energy efficiency solutions.

Direct Install

Direct install (DI) is a specialized financial incentive strategy that delivers energy efficiency solutions, where feasible, to achieve near-term measurable results for customers. A comprehensive DI tactic will extend beyond the standard DI offering to achieve deeper, more comprehensive energy efficiency equipment retrofits. Comprehensive DI will rely, in part, on ratepayer funds and, in part, on customer co-fund contributions and/or customer financing.

c. Application summary tables covering the 4-year budget request

The following tables provide various breakdowns of SoCalGas's budget request without RENs.

d. Annual budget request over four years.

EX02 TABLE 1 | ANNUAL BUDGET REQUEST*

	2024	2025	2026	2027	Total
Portfolio Budget	$151,687,539	$152,297,751	$153,091,120	$154,627,593	**$611,704,003**

** Excludes RENs*

e. Distribution of effort (budget) across segments and sectors

EX02 TABLE 2 | DISTRIBUTION OF BUDGET ACROSS SECTORS AND SEGMENTS (2024-2027)*

	Resource Acquisition	Equity	Market Support	Codes and Standards	Sector Total
Residential	$138,762,385	$81,009,259	$26,004,240	-	$245,775,884
Commercial	$135,855,507	-	$8,256,174	-	$144,111,681
Industrial	$70,831,043	-	$5,774,059	-	$76,605,102
Agricultural	$18,353,923	-	$3,768,380	-	$22,122,303
Public	$34,023,278	-	$15,402,353	-	$49,425,631
Cross Cutting	$7,106,870	$4,891,854	$31,348,912	$5,847,605	$49,195,241
Segment Total	$404,933,006	$85,901,113	$90,554,119	$5,847,605	$587,235,843

EM&V		$24,468,160
Portfolio Budget		$611,704,003

** Excludes RENs*

f. Projected sector-, segment-, and portfolio-level cost effectiveness and forecasts

EX02 TABLE 3A | Projected Cycle Cost Effectiveness (2024-2027)

	TRC	PAC
Portfolio with C&S	1.07	1.92
Portfolio w/o C&S	0.82	1.00

EX02 TABLE 3B | Projected sector-level and portfolio-level cost effectiveness (2024-2027)

	Resource Acquisition		Equity		Market Support		Codes and Standards	
	TRC	PAC	TRC	PAC	TRC	PAC	TRC	PAC
Residential	0.77	1.08	0.42	0.47	0.29	0.34	-	-
Commercial	1.19	1.42	-	-	0.29	0.34	-	-
Industrial	1.62	2.07	-	-	0.97	2.28	-	-
Agricultural	0.98	1.18	-	-	0.52	0.90	-	-
Public	1.32	1.88	-	-	0.08	0.08	-	-
Cross Cutting	-	-	-	-	-	-	1.58	100.23
Segment Total	1.11	1.44	0.40	0.44	0.23	0.26	1.58	100.23

EX02 TABLE 4 | Resource Acquisition Segment Cost Effectiveness by Program (2024-2027)

Program ID	Program Name	TRC	PAC
Agricultural			
SCG3890	AG-Agricultural Energy Efficiency Program	0.93	1.02
Commercial			
SCG_SW_FS	COM-SW-Point of Sale Food Service Program	0.99	1.26
SCG_SW_HVAC_Up_Com	COM-SW-Upstream HVAC Program	1.17	1.89
SCG_SW_MCWH	COM-SW-Midstream Commercial Water Heating Program	1.38	1.65
SCG3813	COM-Savings By Design Program	0.00	0.00
SCG3834	COM-LADWP Direct Install Program	1.69	1.69

Program ID	Program Name	TRC	PAC
SCG3882	COM-Small and Medium Commercial EE Program (Resource Aquisition)	0.96	0.98
SCG3887	COM-Commercial-BEST (Resource Aquisition)	1.54	1.81
SCG3891	COM-Service RCx Large Commercial Program	0.93	0.93
SCG3892	COM-Large Commercial Energy Efficiency Program	1.38	1.76
SCG3898	COM-Nonresidential Behavioral Program	0.63	0.63
SCG3910	CC-Nonresidential Calculated Incentive Program	1.51	1.84
SCG3911	CC-Nonresidential Deemed Incentive Program	1.04	1.71
SCG3937	COM-Small and Medium Commercial EE Program (Equity)	1.35	1.35
SCG3939	COM-SEM	1.29	0.98
SCG3940	COM-Commercial-BEST (Equity)	1.59	1.59
Industrial			
SCG3714	IND-SEM	1.68	1.28
SCG3900	IND-Industrial EE Solicitation	1.70	2.27
Public			
SCG_SW_IP_Colleges	PUB-SW-Institutional UC/CSU/CCC Partnership Program	1.02	1.03
SCG_SW_IP_Gov	PUB-SW-Institutional DGS & DoC Partnership Program	0.60	1.53
SCG_SW_WP	PUB-SW-Water/Wastewater Pumping Program	1.02	1.12
SCG3886	PUB-Public Direct Install Program	2.21	2.21
SCG3899	PUB-Large Pulic Sector EE Solicitation	1.11	1.74
Residential			
SCG_SW_HVAC_Up_Res	RES-SW-Upstream HVAC Program	1.27	1.32
SCG_SW_PLA	RES-SW-Plug Load and Appliance Program	0.91	1.18
SCG3702	RES-Residential Energy Efficiency Program	0.31	0.52
SCG3707	RES-Residential New Construction Program	0.00	0.00
SCG3824	RES-Residential Behavioral Program	2.20	2.20
SCG3831	RES-EE Kit Delivery Program	1.18	1.18
SCG3832	RES-Pasadena Water & Power Home Upgrade Program	1.05	1.63
SCG3833	RES-Burbank Water & Power Home Upgrade Program	1.01	1.52
SCG3883	RES-Residential Advanced Clean Energy Program (Resource Acquisition)	0.63	0.63
SCG3888	RES-Multifamily Space and Water Heating Controls Program	0.96	0.96
SCG3889	RES-Multifamily Energy Alliance Program (Resource Aquisition)	0.49	0.63
SCG3938	RES-Multifamily Whole Building Program (Resource Aquisition)	0.57	0.75

Program ID	Program Name	TRC	PAC
WE&T			
SCG3764	WE&T-Educational Outreach Program	5.08	5.08

EX02 TABLE 5A | SEGMENT AND SECTOR ANNUAL IMPACTS [2024]

Segment	Sector	2024		
		TSB	Thm	CO2e [tonnes]
Resource Acquisition	Residential	$34,851,146	15,143,507	88,590
	Commercial	$43,977,645	7,000,197	34,223
	Industrial	$34,921,151	4,841,086	24,272
	Agricultural	$4,780,831	567,216	2,111
	Public	$12,023,847	2,023,976	9,162
	Cross Cutting	-	-	-
Equity	Residential	$8,554,012	698,912	4,089
	Commercial	-	-	-
	Industrial	-	-	-
	Agricultural	-	-	-
	Public	-	-	-
	Cross Cutting	-	-	-
Market Support	Residential	$3,497,360	311,574	3,278
	Commercial	$300,000	44,823	430
	Industrial	$1,696,654	389,892	2,281
	Agricultural	$167,876	7,548	44
	Public	$286,551	28,558	167
	Cross Cutting	-	-	-
C&S	Cross Cutting	$159,114,867	20,701,172	121,102

EX02 TABLE 5B | SEGMENT AND SECTOR ANNUAL IMPACTS [2025]

Segment	Sector	2025		
		TSB	Thm	CO2e [tonnes]
Resource Acquisition	Residential	$36,658,209	14,981,068	87,639
	Commercial	$46,620,365	7,057,025	41,329
	Industrial	$36,254,349	4,750,216	27,789
	Agricultural	$5,067,170	570,386	3,337
	Public	$13,537,356	2,204,543	12,897
	Cross Cutting	-	-	-
Equity	Residential	$9,015,929	698,912	4,089
	Commercial	-	-	-
	Industrial	-	-	-
	Agricultural	-	-	-
	Public	-	-	-
	Cross Cutting	-	-	-
Market Support	Residential	$3,803,194	315,540	3,301
	Commercial	$321,277	45,676	438
	Industrial	$1,821,991	397,308	2,324
	Agricultural	$180,258	7,692	45
	Public	$307,647	29,101	170
	Cross Cutting	-	-	-
C&S	Cross Cutting	$149,901,040	20,193,515	118,132

EX02 TABLE 5C | SEGMENT AND SECTOR ANNUAL IMPACTS [2026]

Segment	Sector	2026		
		TSB	Thm	CO2e [tonnes]
Resource Acquisition	Residential	$39,370,128	14,983,994	87,656
	Commercial	$48,334,316	7,027,844	41,160
	Industrial	$36,932,991	4,638,013	27,132
	Agricultural	$5,190,948	559,334	3,272
	Public	$14,093,615	2,168,368	12,685
	Cross Cutting	-	-	-
Equity	Residential	$9,494,781	698,912	4,089
	Commercial	-	-	-
	Industrial	-	-	-
	Agricultural	-	-	-
	Public	-	-	-
	Cross Cutting	-	-	-
Market Support	Residential	$3,799,525	273,973	3,058
	Commercial	$251,613	34,089	329
	Industrial	$1,434,411	295,994	1,732
	Agricultural	$142,362	5,731	34
	Public	$242,774	21,680	127
	Cross Cutting	-	-	-
C&S	Cross Cutting	$142,011,991	17,307,158	101,247

EX02 TABLE 5D | SEGMENT AND SECTOR ANNUAL IMPACTS [2027]

Segment	Sector	2027		
		TSB	Thm	CO2e [tonnes]
Resource Acquisition	Residential	$42,242,225	15,001,347	87,758
	Commercial	$52,523,953	7,230,395	42,348
	Industrial	$39,288,504	4,682,829	27,395
	Agricultural	$5,726,853	589,211	3,447
	Public	$15,283,418	2,224,924	13,016
	Cross Cutting	-	-	-
Equity	Residential	$9,972,055	698,912	4,089
	Commercial	-	-	-
	Industrial	-	-	-
	Agricultural	-	-	-
	Public	-	-	-
	Cross Cutting	-	-	-
Market Support	Residential	$3,860,073	249,125	2,912
	Commercial	$199,528	25,705	248
	Industrial	$1,136,851	223,192	1,306
	Agricultural	$112,862	4,321	25
	Public	$192,484	16,348	96
	Cross Cutting	-	-	-
C&S	Cross Cutting	$135,086,837	14,565,299	85,207

EX02 TABLE 6 | Forecast TSB vs Goals

	2024	2025	2026	2027	Total
Portfolio Forecast [$]	$145,057,071	$153,587,745	$159,287,464	$170,538,806	$628,471,086
Adopted TSB Goal [$]	$94,305,917	$105,511,595	$115,302,575	$131,937,530	$447,057,617
Forecast TSB / Goals	1.54	1.46	1.38	1.29	1.41

EX02 TABLE 7 | THIRD PARTY SOLICTED PROGRAM BUDGET

	2024	2025	2026	2027	Total
Third Party Solicited	$102,030,043	$102,396,699	$102,943,484	$103,164,901	$410,535,127
Not Third Party Solicited**	$49,657,496	$49,901,052	$50,147,636	$51,462,692	$201,168,876

Total Program Budget	$151,687,539	$152,297,751	$153,091,120	$154,627,593	$611,704,003
% Third Party Solicited	67%	67%	67%	67%	67%

* Excludes RENs
**Outside the PRG process.

II. FORECAST METHODOLOGY

Consistent with the Commission's direction in D.21-05-031, SoCalGas divided the budget development for the business plan's eight-year time horizon into two periods, 2024-2027 and 2028-2031. This chapter will describe the budget development process for the first four-year period (also known as the Portfolio Plan), summarize portfolio changes from 2023 to 2024, and summarize the costs by category. The budget estimated for the 2024-2027 program period utilizes a zero-based approach.

SoCalGas's actual costs will vary from estimated budgets as customer behavior and market trends are dynamic, and not static. SoCalGas continuously works with customers and partners, monitors trends, and adjusts budgets among programs to increase customer participation and maximize the cost-effective energy saving benefits reaped from SoCalGas's energy efficiency portfolio.

A. Estimating Process for 2024-2027 Portfolio Plan Budget

SoCalGas utilized a zero-based budget approach to develop budgets for the 2024-2027 program period in support of the goals and objectives described in the Business Plan. Detailed budgets are based on portfolio level goals and planned programs, both of which are described in Exhibit 1 and Exhibit 2 of this Application. SoCalGas's cost assumptions are organized into functions and competencies required to administer, market, and implement energy efficiency portfolio. These groupings include program management, program operations, back-office support, engineering, solicitation, marketing, and administrative costs such as policy, reporting, and accounting. Management and subject matter experts provide bottoms-up assumptions for Labor and Non-Labor costs, by year, based on the portfolio of programs each year. SoCalGas's energy efficiency programs are listed in Table 4.1 of Attachment A to this Application for 2024-2027.

Labor functions are planned at the job code (position type and level) and the number of full-time-equivalents (FTEs) for each job code. Each job code represents a type of role and a

level within that role. Examples of job codes include Specialist/Analyst 3 (SA3), Project Manager/Strategic Lead 1 (PM1), and Advisor 2 (AD2). Many job codes represent multiple employees, because some functions demand multiple professionals and some professionals are assigned multiple responsibilities. FTEs by job code are identified by year and allocated to cost categories. The product of FTEs and represented salaries by job code are used to estimate the labor costs, in 2021 dollars, and then escalated to the nominal dollars in 2024-2027. Escalation factors are based on IHS/Market Global Insight "4th Quarter 2021" utility cost forecast, published late January 2022, consistent with Commission approved approach for SoCalGas's General Rate Cases (GRC). Payroll taxes related to labor assumptions is added as SoCalGas recovers payroll tax through its Demand-Side Management Balancing Account (DSMBA). Other labor loaders are recovered through GRC, such as Pension & Benefits.

Similarly, SoCalGas develops annual assumptions for non-labor costs associated with the various functions. Activities are planned by year and allocated to the cost categories. An example of non-labor items is employee reimbursable expenses. Other examples are external resources required to support periodic activities, such as equipment demonstrations and facilitating workshops. Non-labor costs are estimated in 2021 dollars and then escalated to 2024-2027 nominal dollars.

Besides detailing the labor and non-labor costs related to SoCalGas's resources, costs are categorized to comply with the Commission's requirements for showing costs, such as the requirements of D.21-05-031. One of these categorizations is cost category, specifically Administration, Marketing, Direct Implementation Non-Incentive (DINI) and Incentives/Rebates. Another allocation is by function, such as Account Management, Program Management, and Engineering Services. Additional categories at the program level include Segment, Business/Customer Sector, Program Type, and Target Exemption.

Incremental to the bottoms-up development and categorization of labor and non-labor costs described above, SoCalGas develops program level assumptions related to Rebates/Incentives for SoCalGas's Core Programs and costs for Local third-party implemented programs and Statewide Programs by cost category (Administrative, Marketing, Direct Implementation/Non-Incentive, Incentives/Rebates). Rebates/Incentives for SoCalGas's core resource programs are based on historical data, expected cost of equipment, and other related incremental costs by measure. Estimated market penetration and saturation levels are also factored based on experience and expected trends. Local third-party and Statewide program costs are based on combination of existing contracts, contracts in the solicitation process, and

experience with similar programs. SoCalGas costs for Statewide Programs are based on a Commission adopted joint-IOU advice filing.[11]

The culmination of the estimate development described above results in subtotal of costs by each program within SoCalGas's portfolio. The sum of these subtotals and application of Evaluation, Measurement and Verification (EM&V) costs result in total Program Administrator (PA) portfolio costs for SoCalGas. The EM&V is estimated based 4% of total budget as established by the Commission, consistent with the Energy Efficiency Policy Manual, Version 6, April 2020.

In addition to the program costs, SoCalGas requires budget for its contributions towards specific Regional Energy Networks (RENs) as directed by the Commission. REN budgets are estimated by the RENs directly, and SoCalGas's contributions are based on agreed upon split with other IOUs.

EX02 Tables: 8A and 8B below summarizes SoCalGas's proposed budgets based on the above estimating process. Based on current assumptions, SoCalGas estimates a total budget of $611.7 million for its energy efficiency portfolio during 2024-2027, and an additional $57.4 million for RENs.[12] EX02 Table: 8A shows costs by market segment and shows that SoCalGas plans to allocate 66.2%, 14.8%, 14.0%, 1.0%, and 4.0% between Resource Acquisition, Market Support, Equity, Codes & Standards, and EM&V respectively. Similarly, EX02 Table: 8B shows costs by cost category and shows that SoCalGas plans to allocate 9.1%, 4.6%, 38.8%, 43.5%, and 4.0% between Administration, Marketing, Direct Implementation Non-Incentive (DINI), Incentives/Rebates, and EM&V, respectively, for the 2024-2027 portfolio plan.

EX02 TABLE 8A | 2024-2027 BUDGET BY SEGMENT

	4-yr Total	Share
Resource Acquisition	$404,933,006	66.2%
Market Support	$90,554,119	14.8%
Equity	$85,901,113	14.0%

[11] Supplemental – San Diego Gas and Electric Company, Southern California Gas Company, Southern California Edison Company, and Pacific Gas and Electric Company's Shared Funding Mechanism Proposal Pursuant to D. 18-05-041, SDG&E AL 3268-E-A/2701-G-A; SoCalGas AL 5346-G-A; SCE AL 3861-E-A; PG&E AL 5373-E-A/4009-G-A.

[12] D.21-12-011, OP 5 states "Any existing energy efficiency program administrator is authorized to reallocate unspent and/or uncommitted energy efficiency funding, taking into account direction in Decision 21-01-004 with respect to the School Energy Efficiency Stimulus Program, to 2022 and 2023 reliability-focused programs or measures. To implement this authorization, any energy efficiency program administrator may submit a Tier 2 advice letter at any time through the end of June 2023 with notification that they intend to reallocate funds, how, and why, to produce additional summer reliability benefits as specified in this decision." SoCalGas intends to submit a Tier 2 advice letter to reallocate pre-2020 unspent/uncommitted funds to produce summer reliability benefits.

Codes & Standards*	$5,847,605	1.0%
EM&V	$24,468,160	4.0%
Total	$611,704,003	100.0%

** Statewide Codes & Standards Program led by PG&E*

EX02 TABLE 8B | 2024-2027 BUDGET BY COST CATEGORY

	4-yr Total	Share
Administration*	$55,511,364	9.1%
Marketing	$27,872,329	4.6%
DINI	$237,499,589	38.8%
Incentives/Rebates	$266,352,561	43.5%
EM&V	$24,468,160	4.0%
Total	$611,704,003	100.0%

** includes 3P Administration costs*

The budgets are developed to support SoCalGas's vision and goals described in Exhibit 1. Exhibit 2 provides additional information about strategies, challenges and goals, by segment, and by sector. Savings targets are summarized in EX02 Table 5. Details regarding the value of SoCalGas's proposed Energy Efficiency portfolio can be found in Exhibit 3, Appendix A.

B. Proposed Portfolio Changes

In a continuous attempt to maximize value to customers, SoCalGas shifts its portfolio priorities based on evolving customer preferences, market trends, and regulatory policies. SoCalGas's proposal includes increased funding for: (1) successful innovative third-party implemented programs to increase resource acquisition segment impact; (2) innovative approaches to support the energy efficiency market; and (3) improved energy efficiency opportunities for equity-defined customers in safe and affordable ways. As shown in Table 8C, SoCalGas plans to achieve these objectives while supporting Commission's desire to increase third-party participation in executing programs. SoCalGas plans to reduce budgets related to its core programs and increase budgets for Local Third Party (3P) Programs from 2023 to 2024.

EX02 TABLE 8C | 2023 vs. 2024, PROGRAM TYPE CHANGES

	2023	2024	Change	
Core PA Programs	$43,314,638	$40,180,910	$(3,133,728)	-7%
Local 3P Programs	$66,417,402	$88,661,395	$22,243,993	33%
SW Programs	$17,402,926	$16,777,733	$(625,193)	-4%
Total	**$127,134,966**	**$145,620,038**	**$18,485,072**	**15%**

** Excludes RENs*

Further, to support the Commission's vision of creating parity in the awareness and access to EE programs across the entire state, SoCalGas is planning to budget more in the Equity and Market Support program categories. Reference EX02 Table: 8D, budget increases from 2023 to 2024 are weighted towards expanding Equity segment programs.

EX02 TABLE 8D | 2023 vs. 2024 SEGMENT CHANGES

	2023	2024	Change	
Resource Acquisition	$90,988,289	$100,328,888	$9,340,599	10%
Market Support	$18,629,942	$22,403,256	$3,773,314	20%
Equity	$16,410,077	$21,425,993	$5,015,916	31%
Codes & Standards	$1,106,658	$1,461,901	$355,243	32%
Total	**$127,134,966**	**$145,620,038**	**$18,485,072**	**15%**

** Excludes RENs and Codes & Standards Program led by PG&E*
**Statewide Codes & Standards Program led by PG&E*

Different types of program changes are planned to support the direction, goals and targets described in Exhibits 1 and 2. Changes include disposition of programs, new programs, and programs with significant budget changes (+/- 40%). Please see Exhibit 03, Appendix A, Table 4.3, for these various listings of program changes.

The combination of these portfolio changes and detailed budget development by program and cost categories are expected to help support State policies via SoCalGas's vision, goals, and savings targets for the 2024-2027 Portfolio Plan. Including RENs, SoCalGas is requesting approval of $669.1 million for this four-year Portfolio Plan as part of this Application.

III. SEGMENTATION STRATEGY

In D.21-05-031, the CPUC directed the PAs to segment their portfolio and programs into Resource Acquisition, Equity, and Market Support. This section describes SoCalGas's overarching goals, strategies and anticipated outcomes for each segment. SoCalGas also provides the budget distribution by segment as it relates to the categorization of each program within each respective sector. SoCalGas is committed to offering a balanced energy efficiency portfolio that addresses Resource Acquisition, Market Support, and Equity segment objectives, while continuing to support Codes and Standards.[13] SoCalGas will look for new, innovative ways to meet the objectives of each unique segment, from leveraging the creative programs

[13] D.21-05-031, pp. 14-15. Pursuant to Commission decision D.18-05-041, OP 53 SoCalGas's role in codes and standards is limited to only "transfer ratepayer funds to the statewide lead for codes and standards[.]"

designed by the third-party implementer community to expanding partnerships with other entities (e.g., publicly owned utilities, water agencies, labor unions, community-based organizations).

A. Strategies Driving Distribution of Budget Among Segments

SoCalGas's portfolio segmentation strategy balances the multiple CPUC energy efficiency objectives including: achieving CPUC-adopted energy efficiency goals, administering a cost-effective energy efficiency portfolio, incorporating elements of the ESJ action plan, and supporting the energy efficiency market. SoCalGas's strategy, enabled by Commission Decision,[14] allows the energy efficiency portfolio to meet multiple objectives without needing to focus solely on near-term cost-effective energy efficiency. SoCalGas proposes a portfolio that will nurture and expand equity and market support alongside a portfolio of cost-effective resource acquisition programs. The combined budgets for the Market Support and Equity segments in this portfolio plan are below 30% for each program year and the Resource Acquisition segment has a TRC ratio greater than 1.0. To remain in compliance, some cost-effective programs with a primary purpose providing energy efficiency to customers that are hard-to-reach, underserved, or in Disadvantaged Communities, have been categorized as Resource Acquisition. Due to the large number of SoCalGas customers that meet the criteria[15] to be considered for equity programs, SoCalGas proposes to increase the emphasis and funding for Equity and Market Support beyond the current 30 percent funding limitations. This will better enable SoCalGas and program providers to address equity concerns at a scale more reflective of SoCalGas's customer base.

B. Preliminary Distribution of Budget Among Segments for 2024-2027

The CPUC has limited the program budget for equity and market portfolio segments to 30 percent of the Program Administrator's total budget based on historic IOU non-resource program spending levels.[16] As stated in the Strategic Business Plan (Exhibit 01), SoCalGas is proposing a policy change that would increase the maximum budget cap across Equity and Market Support programs. The proposed budget distribution of segment budgets for 2024-2027 is as follows:

[14] D.21-05-031, pp. 14-15.
[15] The CAEECC EMWG Report (Oct 10, 2021) lists "hard-to-reach, disadvantaged, and/or underserved individuals, households, businesses, and communities" as the targets for equity program objectives.
[16] D. 21-05-031, p. 75, COL 9.

EX02 TABLE 9 | SEGMENT BUDGET DISTRIBUTION*

Segment	2024	2025	2026	2027	Total
Resource Acquisition	$100,328,888	$100,714,930	$101,233,221	$102,655,968	$404,933,006
Equity	$22,403,256	$22,571,994	$22,789,894	$22,788,975	$90,554,119
Market Support	$21,425,993	$21,457,016	$21,482,459	$21,535,645	$85,901,113
Codes and Standards	$1,461,901	$1,461,901	$1,461,901	$1,461,901	$5,847,605

** Excludes EM&V and RENs.*
**Codes and Standards led by PG&E*

1. Resource Acquisition Segment

In response to challenges with cost-effectiveness in relation to other policy objectives, the CPUC has recently made policy changes to the energy efficiency portfolio's cost-effectiveness requirements.[17] This policy change will allow SoCalGas to capture cost-effective energy savings while other CPUC policies are addressed in the Market Support and Equity program categories. SoCalGas will focus resource acquisition activities on achieving the CPUC's annual Total System Benefit (TSB) goal and delivering cost-effective avoided cost benefits to its natural gas system in the Portfolio Plan period. The objectives of the Resource Acquisition include:

- Target high potential energy efficiency opportunities to maximize ratepayer investment in energy efficiency
- Pursue near-term behavioral and operational energy savings across all sectors
- Reduce transactional costs of program delivery

SoCalGas will offer coordinated customer segment-level strategies to achieve these objectives, including introducing solar thermal measures, expanding strategic energy management (SEM) programs to other nonresidential sectors, increased energy efficiency funding for industrial and commercial sectors, and proactive customer engagement targeting higher energy efficiency potential opportunities.

Segment-specific strategies, goals, and outcomes

EX02 TABLE 10: Resource Acquisition Segment – Goals, Strategies & Outcomes	
Vision: Provide a suite of solutions that incorporates the best available technologies and services valued by SoCalGas customers, contributes to achieving energy efficiency goals, and ultimately aligns with the State's overarching energy and environmental goals.	
	Achieve CPUC Total System Benefit Goals

[17] D. 21-05-031, p. 75, COL 8.

EX02 TABLE 10: Resource Acquisition Segment – Goals, Strategies & Outcomes		
Overarching Goals	Efficient and simplified procurement of cost-effective energy efficiency	
	Simplified Customer Transaction	
Segment Objectives	**Strategies**	**Outcomes**
Target high potential energy efficiency projects to maximize ratepayer investment in energy efficiency	Focus on high energy efficiency potential projects with high propensity customers	Achievement of CPUC-adopted TSB goals
	Expand nonresidential On-Bill Financing, On-Bill Repayment and residential energy efficiency loans and microloan offerings	Increased energy savings for participating customers
		Increase customer participation and adoption of energy efficiency solutions
Pursue near-term behavioral and operational energy savings across all sectors	Expansion of NMEC	Increased energy savings that are otherwise unable to be quantified resulting in portfolio cost-effectiveness.
	Expansion of SEM and Behavioral retrocommissioning, and Operational (BRO) offerings	Increased short-term cost-effective energy savings
		Increased customer participation and adoption of energy efficiency solutions
Reduced transactional cost and program delivery	Effective and streamline program delivery through innovative third-party proposals.	Increased diversity of energy efficiency service providers
	Reduce project requirements, efficient and streamline project reviews.	Reduced project review times, fewer disagreements over energy savings claims
	Centralized customer incentive processing	Increased customer participation and adoption of energy efficiency solutions

2. Equity Segment

SoCalGas's plan for the Equity segment includes a focus on distributional equity. Distributional equity enables programs to provide fair distributions of energy efficiency benefits across all customer sectors with the highest priority given to those customers with the greatest need. SoCalGas Equity efforts focus on these customers' needs to reduce their energy cost burden, improve their quality of life, and increase comfort and safety. Traditional Resource Acquisition programs focus on those customers that can generate the highest levels of energy savings at the lowest cost. While important to the utility energy grids, Resource Acquisition programs tend to devalue customers with small energy footprints and customers too costly to serve (e.g., rural customers). SoCalGas's Equity portfolio focuses on the customer's individual energy efficiency needs through targeted tailored offerings.

SoCalGas proposes to enrich its energy efficiency portfolio with programs with the primary purpose of providing energy efficiency solutions to hard-to-reach, disadvantaged, and/or underserved individuals, households, businesses, and communities (equity classified). Consistent with the CPUC's Environmental and Social Justice (ESJ) Action Plan,[18] SoCalGas will focus on improving access to energy efficiency for these selected customer groups that will provide corollary benefits such as increased comfort and safety. SoCalGas will rely on the primary objective presented by the CAEECC Working Group on Equity, which states that for hard-to-reach, disadvantaged, and/or underserved individuals, households, businesses, and communities, the objective is to:

- Address disparities in access to energy efficiency programs and workforce opportunities;
- Promote resilience, health, comfort, safety, energy affordability (bill savings), and/or energy savings; and
- Reduce energy-related greenhouse gas and criteria pollutant emissions.[19]

SoCalGas will directly support the achievement of the Equity objectives through:

- Expanding outreach efforts to equity-classified customers and increasing their participation in energy efficiency program activities
- Increasing deep and comprehensive energy efficiency adoption for equity-classified customers leveraging the energy savings, carbon emission reduction, and water efficiency nexus through partnering
- Improving air quality and safety for equity-classified customers.

SoCalGas's Equity approach will rely on tactical strategies such as coordinated engagement with equity-qualified customers, including those in Disadvantaged Communities, across all sectors at the customer segment-level, synchronized offerings with other Distributed Energy Resource programs, including SoCalGas's Energy Savings Assistance Program, to leverage energy/water/emission nexus opportunities, and employing commercial kitchen fugitive methane mitigation interventions.

SoCalGas will actively pursue fugitive methane mitigation in targeted customer segments to directly support improved air quality. A California Energy Commission (CEC) study identified that the foodservice industry and other commercial sites might hold significant

[18] For more information, *see* the following link: https://www.cpuc.ca.gov/esjactionplan/.
[19] CAEECC-Hosted Equity Metrics Working Group Report (October 20, 2021) Section 3: Objective.

untapped potential to mitigate methane.[20] Identifying and ensuring exceptionally leak-tight systems in commercial kitchens can help reduce the risk to the climate posed by fugitive methane emissions, as well as reduce customers' energy usage.

Segment-specific strategies, goals, and outcomes

EX02 TABLE 11: Equity Segment – Goals, Strategies, Outcomes		
Vision: Provide energy efficiency solutions to hard-to-reach customers, underserved customers, and customer groups residing in disadvantaged communities.		
Overarching Goals	**Improve access to energy efficiency programs and services**	
	Increased comfort and safety, improved indoor air quality, and more affordable utility bills	
	Address disparities in access to workforce opportunities	
Segment Objectives	**Strategies**	**Outcomes**
Expand outreach efforts to equity-classified customers and increase their participation in energy efficiency program activities by the Equity-classified customers	Employ tailored outreach strategies to equity-classified customers	Increased awareness by equity-classified customers of their energy efficiency opportunities.
	Provide technical assistance to help customers understand energy efficiency interventions' scope and depth. Train on benefits of energy efficient equipment.	Higher level of adoption of energy efficiency solutions by equity-classified customers.
Increase deep and comprehensive energy efficiency adoption levels for all residential and nonresidential customers leveraging the energy savings, carbon emission reduction, and water efficiency nexus through partnering	Provide higher incentives, direct install, and/or financing to equity-classified customers	Increased levels of deeper and comprehensive energy efficiency among equity-qualified and smaller-sized customers.
	Continue promotion of partnering and enhanced incentives with public agencies and public utilities for energy-efficient measures that also promote water efficiency and carbon emission reductions.	Greater adoption of energy efficiency measures creates water efficiency and emission reductions.
Reduce energy-related greenhouse gas and criteria pollutant emissions	Promote incentives for higher and most efficient measures that reduce GHG emissions.	Greater adoption of higher and most efficient measures that significantly reduce GHG emissions.
	Implement fugitive methane mitigation in targeted customer segments to directly support	Reduced fugitive methane in targeted customer groups with significant untapped potential.

[20] CEC-500-2020-048, p. 34

EX02 TABLE 11: Equity Segment – Goals, Strategies, Outcomes		
Vision: Provide energy efficiency solutions to hard-to-reach customers, underserved customers, and customer groups residing in disadvantaged communities.		
Overarching Goals	**Improve access to energy efficiency programs and services**	
	Increased comfort and safety, improved indoor air quality, and more affordable utility bills	
	Address disparities in access to workforce opportunities	
Segment Objectives	**Strategies**	**Outcomes**
	improved indoor air quality for customers and their employees.	

3. Market Support

SoCalGas will support the energy efficiency market in five discreet areas: demand, supply, partnerships, innovation & accessibility, and access to capital, consistent with the objectives outlined in the CAEECC Working Group on Market Support.[21] Through its Market Support segment, SoCalGas will enable the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, and evolving energy efficiency technologies towards greater cost-effectiveness. Market Support activities will also encourage customers to adopt cleaner energy technologies that reduce carbon emissions. SoCalGas's core objectives of the Market Support segment include:

- Build demand for energy-efficient products and services in all sectors; and increase access to capital to help customers overcome cost barrier to energy efficiency.
- Expand outreach to local trade and market channel actors on energy efficiency training and education
- Identify and advance newer technologies and applications (i.e. emerging technologies)
- Leverage existing skilled labor unions to maintain and install energy efficiency equipment safely

Customer segment-level strategies will be applied across all customer sectors to meet Market Support objectives, including: educating, training, and supporting market and trade allies on energy efficiency installation and maintenance; equipping program implementers with a comprehensive set of suitable technology options for new measures; and leveraging existing union labor to deliver quality energy efficiency installations and maintenance.

[21] CAEECC Equity Metrics Working Group Report, Section 3: Primary Objective and Sub-Objectives.

Segment-specific strategies, goals, and outcomes

EX02 TABLE 12: Market Support Segment – Goals, Strategies, Outcomes		
Vision: Enable the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, and evolving energy efficiency technologies towards greater cost-effectiveness.		
Overarching Goals	Enable long-term energy efficiency	
	Adopt cleaner energy technologies that reduce carbon emissions	
	Leverage trained and qualified workforce in program delivery	
Segment Objectives	**Strategies**	**Outcomes**
Build demand for energy-efficient products and services in all sectors	Provide an online retail marketplace to promote higher efficient products and services to all customer sectors.	Increased customer adoption of energy efficiency products and services across all customer sectors.
	Create awareness and educate customers and contractors of energy efficiency financing options to reduce the first cost market barrier.	Empowered customers and contractors to use available financing vehicles to achieve deeper and more comprehensive energy efficiency levels.
	Support the development of energy efficiency requirements (e.g., organizational strategies, sustainability goals, and centralized energy billing practices)	Customers automatically consider and adopt energy efficiency solutions by incorporating energy efficiency into the organization's energy strategy, policies, and procedures.
	Deploy education, training, and energy efficiency products to market allies and trade professionals, particularly small enterprises.	Informed market intermediaries and end-use customers on a full range of available energy efficiency resources and products create a demand for end-user customers' energy efficiency products and services.
	Continue development of home energy rating systems to promote the value of energy-efficient homes in the resale market.	Increased demand for efficient homes by customers in the residential resale market.
Expand outreach to local contractors and market actors on EE training and education	Adapt training courses, curriculum and related materials to extend reach, expand use, availability and access to specific technical content.	Increase the number of contractors trained/educated on energy efficiency technical content.
	Coordinate on an energy efficiency education pathway for students and the energy efficiency workforce that promotes career awareness, core energy education, career enhancement, and technical skills advancement.	Increased number of students who advanced their technical skills and expanded their career opportunities.
	Educate owners and tenants about energy efficiency opportunities by	Improved decision-making process between Tenant and Owner

EX02 TABLE 12: Market Support Segment – Goals, Strategies, Outcomes		
	expanding customer representative network and providing targeted customer outreach in the single-family and multi-family segments.	relationships regarding energy efficiency installation.
Identify and advance newer technologies and applications (i.e., emerging technologies)	Collaborate with key stakeholders on energy efficiency education	Enhance and develop energy efficiency content for greater uniformity
	Identify emerging gas technologies with energy savings opportunities for customers in all sectors.	Increased number of emerging technologies available to energy efficiency program implementers.
	Develop technology priority maps (TPMs) to identify good emerging technology candidates for all utility programs including market transformation initiatives.	Fully vetted TPMs lead to a robust set of emerging technologies for the energy efficiency program portfolio.
	Conduct testing and demonstration of emerging technologies.	Increased number of emerging technologies that will support long-term energy savings for the program portfolio.
Leverage existing trained and skilled labor unions to safely maintain EE equipment	Coordinate with represented labor to identify energy efficiency installation services that can be provided to support energy efficiency programs.	A trained workforce that is available to perform energy efficiency installations safely.
	Collaborate with energy efficiency program implementers to identify opportunities to leverage trained represented labor.	Increased number of programs leveraging trained, represented labor.

C. Interaction with Market Transformation Activities

An essential element of the Market Support portfolio segment is its promotion of emerging technologies to help customers achieve higher energy efficiency and decarbonization levels. The Statewide Gas Emerging Technologies (ET) program is a critical element to the Market Support offerings by identifying emerging technologies for the program portfolio and its implementers. The CPUC is currently identifying a new statewide market transformation administrator (MTA) to advance market adoption of new energy efficiency technologies across the IOU service territories. As the market transformation activities begin, SoCalGas and the Statewide GET program implementer will coordinate with the new MTA to enable a seamless pathway for emerging technologies to be advanced by new market transformation initiatives, where practicable. This approach may be in addition to emerging technology promotion conducted through the IOUs' energy efficiency program portfolio.

D. Market Support and Equity Segments Metrics

The charge of CAEECC's Equity and Market Support Metrics Working Groups was to identify and define the most important objectives and associated metrics for the new Equity and Market Support portfolio segments established D.21-05-031. SoCalGas will track towards these metrics in advance of the 2024-2027 program cycle to evaluate the progress of these new portfolio segments. The complete listing of the market support and equity segment performance metrics is presented in Attachment A in Exhibit 3. SoCalGas will develop targets for the metrics at a later date as data is collected over the next two program years (2022-2023).

E. Codes & Standards

The Statewide Codes & Standard (C&S) sector is highly cost-effective since savings continue to accrue for many years following the C&S program advocacy activities. The program objective is to cause permanent reductions in energy use through improvements to the Building Energy Efficiency Standards and State and Federal Appliance Standards. Several years may elapse between advocacy efforts realized savings due to delays between research and rulemakings and between adoption and effective dates.

Pacific Gas & Electric Company (PG&E), the lead PA, recently procured the Statewide C&S program as part of the IOUs' third-party program solicitations conducted over the previous funding cycle. The proposed budget will continue to fund the new Statewide C&S as planned. Pursuant to Commission decision D.18-05-041, OP 53 SoCalGas's role in codes and standards is limited to only "transfer ratepayer funds to the statewide lead for codes and standards[.]" More information on the Statewide C&S program, including specific strategies, goals, outcomes, metrics, and coordination can be found in PG&E's Business Plan.

IV. SECTOR STRATEGY

SoCalGas is committed to offering a balanced portfolio that provides customers in each sector with accessible and valued energy efficiency programs that address each sector's vision and goals as outlined in the Business Plan. SoCalGas will continue to administer its energy efficiency portfolio with its existing approach to customer sectors. These sectors include Residential, Commercial, Industrial, Agricultural, Public, and Cross-Cutting (Emerging Technologies, Workforce Education and Training Outreach, Finance). The following sections outlines objectives, expected outcomes, intervention strategies, and coordination & partnering with key stakeholders for each sector. SoCalGas will continue to look for new, innovative ways to meet the objectives of each sector, from leveraging the creative programs designed by the third-party implementer community to expanding partnerships with other entities (e.g., Publicly-

Owned Utilities or POUs, Air Quality Management Districts or AQMDs, water agencies, labor unions, community-based organizations).

SoCalGas's portfolio sector strategy balances the needs of all our customers along with multiple CPUC energy efficiency objectives including achieving CPUC adopted EE goals and metrics, administering a cost-effective EE portfolio, and supporting the energy efficiency market. This includes expansion of energy efficiency activities in a strategic manner, especially in those market sectors with limited options to pursue cleaner renewables solutions for their businesses and to increase adoption of energy efficiency and decarbonization solutions within disadvantaged communities. The various sectors encompass strategies and programs that are resource acquisition based such as incentive based programs, equity-based that are focused on providing offerings and services to the underserved and disadvantaged communities, and market support programs such as education and training programs and emerging technologies that help accelerate energy efficiency adoption. SoCalGas based its budget distribution among sectors on several key factors, including:

- Meeting TSB annual goals and cost-effectiveness threshold requirements established by the CPUC in Decision 21-09-037.
- Delivering a cost-effective suite of resource acquisition segment programs as required by Decision 21-05-031.[19]
- Expanding nonresidential budgets to achieve higher levels of cost-effective EE.
- Expanding the Equity and Market Support budgets to support equity-qualified customers and expand on education, training, and outreach efforts.
- Executing on sector goals and strategies and achieving sector metric targets.
- Incorporating historical program performance across sectors and customer groups showing a propensity and potential for EE solutions.

The proposed budget distribution of sector budgets for 2024-2027 is as follows:

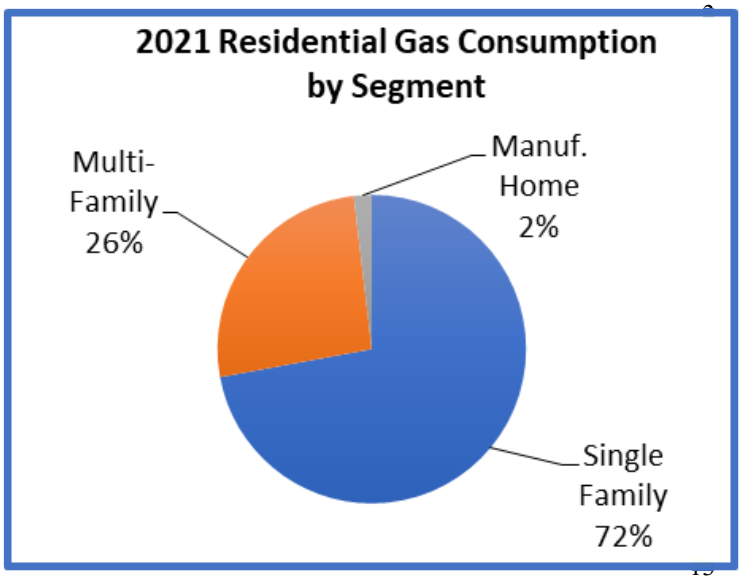
EX02 TABLE 13 | SECTOR BUDGET DISTRIBUTION*

Sector	2024	2025	2026	2027	Total
Residential	$61,034,253	$60,892,372	$61,473,012	$62,376,247	$245,775,884
Commercial	$35,681,635	$35,914,638	$36,107,658	$36,407,749	$144,111,681
Industrial	$19,434,308	$19,257,848	$18,958,556	$18,954,390	$76,605,102
Agricultural	$5,451,576	$5,472,232	$5,579,366	$5,619,130	$22,122,303
Public	$11,837,519	$12,414,832	$12,514,014	$12,659,266	$49,425,631
Cross Cutting	$12,180,747	$12,253,917	$12,334,869	$12,425,708	$49,195,241

** Excludes EM&V and RENs*

A. Residential Sector

In upcoming years, SoCalGas's residential energy use will be transformed to ultra-high levels of energy efficiency. All energy efficiency potential, especially carbon emission reduction potential, will be routinely realized for all residential properties and fully integrated with other customer demand-side management options – including GWP-free solar thermal applications.



The residential energy efficiency sector offers specific and comprehensive energy solutions for residential customers. By encouraging the adoption of economically viable energy efficiency technologies, practices, and services, these programs employ strategies and tactics to overcome market barriers while delivering services that support the CPUC's Energy Efficiency Strategic Plan and SoCalGas's Business Plan. The sector will promote awareness of other demand-side management options focusing on decarbonization solutions such as hydrogen fuel cells for buildings and vehicles.

SoCalGas's residential sector focus is to:

- Facilitate, sustain, and transform the long-term delivery and adoption of the most efficient energy efficiency products and services across all segments with added emphasis on equity-qualified customer groups,
- Cultivate, promote, and sustain lasting energy-efficient behaviors by residential customers through collaborative education and outreach efforts; and
- Create pathways to deeper, more comprehensive approaches with an emphasis on decarbonization solutions for customers through partnering, financing and other innovative methods.

Residential Energy Efficiency Programs include a portfolio of local and statewide programs comprising financial incentives and service offerings from appliance rebates,

midstream, and upstream rebates, comprehensive direct install, whole-building approaches, marketplace, and new construction. Additionally, programs and offerings will be enhanced and tailored to meet the needs of hard-to-reach customers, disadvantaged communities, and equity classified customers. Programs will also be integrated with partnering opportunities with municipalities, air quality management districts, and water districts.

SoCalGas residential customers collectively consumed over 2.4 billion therms of natural gas in 2021. The total residential sector usage represents approximately 45% of the total SoCalGas energy usage. Over 50% of SoCalGas's customers live in Disadvantaged Communities as defined by the California Senate Bill 535.

1. Sector-Specific Goals, Objectives, and Strategies

The residential sector is entering a period of significant change, with new and innovative energy efficiency programs being shaped by legislation and government regulations. The table below highlights the residential sector goals and corresponding outcomes to lower household consumption.

EX02 TABLE 14: Residential Sector - Goals & Objectives

Sector Goals	Objectives
Achieve comprehensive, deep energy efficiency levels across all segments, focusing on equity-classified customers through efficient outreach and compelling offerings.	Increase program participation and energy savings in all segments, including equity-classified customers, by 50% over 2015 levels by 2030.
Increase adoption of the most energy-efficient equipment and energy management devices, including solar water heating.	Increase energy savings by adopting the most energy-efficient equipment by 50% over 2015 levels by 2030.
Increase customer adoption of comprehensive home solutions addressing energy, water, and emissions reduction through multi-agency partnerships serving a shared customer base.	Increase the number of agency/POU partnerships and expand existing arrangements that advance the adoption of energy efficiency, water conservation and emission reduction solutions.
Leverage existing trained represented labor resources to help energy efficiency programs deliver services safely and reliably to residential customers.	Provide access to a uniquely trained workforce that programs can leverage to increase delivery efficiency and maintain safe and reliable installations for residential customers.

2. Challenges and Outcomes

SoCalGas faces several challenges in its efforts to accelerate adoption of deep and long-lasting energy efficiency measures and practices in the residential sector. The challenges faced by the residential sector and corresponding expected outcomes resulting from reducing these market barriers are shown below.

EX02 TABLE 15 – Residential Sector – Challenge & Outcomes	
Sector Challenges	**Expected Outcomes**
Deeper, more comprehensive EE solutions are too costly for customers, and cost effectiveness is difficult to attain due to the high first cost.	Increased customer adoption of deeper, more comprehensive energy efficient solution.
Low participation across the residential sector, especially in the equity-classified customer groups.	Increased customer adoption of gas energy efficiency solutions, including behavioral-related actions, across all residential segments, especially within equity-classified customer groups.
Communication barriers exist between retailers/contractors and customers leading to information on energy efficiency programs and products not being presented effectively to customers.	Ongoing communication and updates to the retailers on qualifying equipment and rebate offerings that are presented to customers in an effective manner.
Lack of awareness of program offerings and services	Increased customer awareness on the availability and access to both statewide and local offerings.
Customers need "bundled/packaged" energy efficiency solutions to realize comprehensive energy efficiency improvements. They often need to obtain technical or financial information from multiple sources to bring energy efficiency improvements together for their properties.	Increased customer awareness of bundled/packaged solutions that deliver credible and reliable info on energy efficiency equipment, expected energy savings, access to installing contractors, and available financing to assist them in complex projects through a single-point-of-contact or one-stop-shop services.

3. Strategies

SoCalGas will rely on a combination of existing, proven strategies and new, innovative ones to arrive at a complete energy efficiency solution set for the residential customer. The new and existing program strategies will be introduced to the customers over time and may be withdrawn and retooled to adapt to dynamic market changes and ongoing modifications to regulatory program policies. As with most program areas, SoCalGas will seek creative and innovative designs from the third-party community to build a complete sector solution strategy. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 16: Residential Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a resource-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.	• Public agencies and municipalities (AQMDs, POUs, water agencies) • Industry (Trade Associations, Manufacturers, Distributors, Advocates) • Trade Ally Networks
Intelligent Outreach	Identify and assist customers in achieving the greatest energy efficiency opportunities, improve efficiency in program delivery and provide deeper, comprehensive energy savings solutions.	• Data Analytics • Customer Targeting • Propensity Modeling • Data Sharing • Customer Outreach and Awareness • Single Point of Contact
Energy Audits	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, segment-specific benchmarking, and provide deeper, comprehensive energy savings solutions.	• Virtual Energy Audits • Energy Audits • Energy Mgmt. Technologies • Industry Best Practice Sharing
Technical Assistance	Provide education and training to property owner or key facility personnel on energy efficiency practices and supplemental assistance in energy efficiency project development and implementation for individual customer projects. Provide integrative sustainability assistance (e.g. technical assistance, education, project optimization) through Sustainable Studio to customers, trade professionals and stakeholder organizations that include all aspects of demand side management (energy efficiency, water, emission, sustainability, renewables, and decarbonization).	• EE Project Management • Engineering Support • Single-Point-of-Contact • Design Assistance • Sustainable Studio

EX02 TABLE 16: Residential Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Education & Training	Deploy timely, targeted, and relevant education and instruction to customers, trade professionals and customer intermediaries.	• Contractor Training • Distributor Training • Loan Awareness • Realtor Sales Training & Awareness • Home Energy Rating
Behavioral Awareness	Provide feedback and tools about home energy use, including normative comparisons to similar homes, tips for improving energy efficiency, and occasionally messaging about rewards, incentives, or competitions among participating businesses.	• Home Energy Reports • Energy Performance Rating
Customer Incentives	Facilitate customer choice by offering a simplified suite of financial incentives strategies to reduce the high first cost barrier, the key market barrier for most customers.	• Meter-based Incentives • Deemed Incentives • Custom Incentives • Bundled Measures • Tiered Incentives • Incentive Stacking
Direct Install	Provide direct installation of a comprehensive suite of energy and water efficiency solutions using contracted workforce to residential customers of all segments, with a particular focus on disadvantaged communities.	• Standard Direct Install • Comprehensive Direct Install • Customer Co-Payments
Mid/Upstream Energy Efficiency	Provide financial incentives to manufacturers, distributors, retailers to reduce the retail cost of energy efficiency equipment, promote stocking of energy-efficient equipment, and inform the customer on the availability of EE equipment at the midstream level.	• Mid/Upstream Incentives • Distributor Training

EX02 TABLE 16: Residential Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Financing and Alternative Funding	Provide various financing vehicles to encourage customers to adopt deeper, more comprehensive energy efficiency solutions. Assist customers in finding and applying for EE financing to help reduce customer first cost barrier (e.g., GoGreen Home Energy Financing). Assist customers in connecting to "specialized" financing for energy efficiency property improvements. Bundle or layer financing offers with other program offerings to ease customer adoption of deep energy saving interventions.	• EE Loans • Credit Enhancements • Single Point of Contact Financing Assistance
Online Marketplace	Provide an innovative online platform for sellers and buyers of efficiency products where they can transact efficiently and securely using financing where available.	• Online Marketplace Website • Micro-loans

4. Sector-specific coordination (if needed)

SoCalGas provides natural gas to one of the largest residential markets in the country. The success of the residential sector Portfolio Plan will rely on positive, collaborative relationships with several market actors, Program Administrators, regulators, and other government entities. Above and beyond coordination with various market actors, SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following table presents a list of key partners that SoCalGas will leverage to achieve the vision for the residential sector.

EX02 TABLE 17: Residential Sector - Partnering	
Partner / Leveraging	**Details**
Governments (Local, State & Federal)	SoCalGas will work with state and federal agencies to promote greater energy efficiency adoption throughout the various customer segments.
	SoCalGas will continue its long-term collaboration with California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) to design and promote innovative financing strategies that encourage greater customer investment in energy efficiency.

EX02 TABLE 17: Residential Sector - Partnering	
Partner / Leveraging	**Details**
Industry (Contractors, trade associations, advocates)	Partner, when appropriate, with industry associations and vendors (e.g., equipment/appliance contractors, home builders, property management companies, building associations, realtors, lenders, etc.) to increase program participation and achieve higher energy efficiency adoption levels with the residential sector.
	Trade organizations can survey their membership to find common concerns and potential solutions. Understanding these concerns can help Program Administrators construct value propositions and tailor their program offerings to best serve these customers.
	Trade organizations have established communication channels with the industry that can facilitate the education of residential customers about energy efficiency programs through a variety of forums including, event and trade shows, social and print media, ad hoc round tables, and regular meetings.
	SoCalGas will collaborate with trade allies to increase program promotion and customer awareness of the benefits of energy efficiency investments.
	Specialized technical assistance with expertise in specific residential segments can be highly effective in identifying energy savings opportunities.
	The expertise can be provided by resources that include in-house utility experts, independent technical consultants, and equipment vendors.
Suppliers (manufacturers, distributors, retailers)	SoCalGas will actively work with equipment vendors and manufacturers to promote greater adoption of energy efficiency equipment among the various segments.
POUs, AQMDs, Water Agencies, and Water Districts	Actively coordinate with POUs, AQMDs, and water agencies to deliver energy and water efficiency programs.
	Engage in partnerships and co-delivery arrangements with POUs and water agencies when there is a shared customer base (gas and electric) to simplify customer engagement and achieve higher levels of energy efficiency.
	Actively coordinate with POUs and water agencies throughout California and other regions to share best program administration, design, and delivery practices.

Open and continuous collaboration is key to addressing the needs of residential customers. SoCalGas will actively coordinate with all Program Administrators to increase customer awareness and enable customers to adopt energy efficiency solutions for their homes. As the program portfolio administrator, SoCalGas will collaborate with its diverse third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the residential sector.

EX02 TABLE 18: Residential Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Deliver comprehensive gas and electric programs to reach more customers.
	Leverage all available best practices and promote statewide consistency, where appropriate.
	Simplify program engagement.
	Capture all energy efficiency benefits, including operational energy savings.
	Conduct market research to identify and understand unique barriers to energy efficiency investments.
	Provide equitable access to the programs for customers located in Disadvantaged Communities.
	Coordinate with the ESA program to create greater energy efficiency program participation from moderate-income customers.
Third-party Program Implementers	Solicit innovative programs and creative solutions from diverse third-party program implementers that can be implemented quickly and effectively.
	Continue collaboration with program implementers throughout the program's lifecycle.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to simplify program requirements and coordinate policies that will recognize all energy efficiency benefits associated with residential sector energy efficiency programs.

5. Categorization by Segment

EX02 TABLE 19: Residential – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Residential Energy Efficiency Program • Residential Behavioral Program • Energy Efficiency Kit Delivery Program • Pasadena Water & Power Home Upgrade Program • Burbank Water & Power Home Upgrade Program • Residential Advanced Clean Energy Program (RA) • Multifamily Energy Alliance Program (RA)	• Comprehensive Mobile Home Program • Residential Mobile Home Program • Community Language Efficiency Outreach Program • Residential Advanced Clean Energy Program (Equity) • Multifamily Energy Alliance Program (Equity)	• Residential Energy Advisor • Marketplace • Sustainable Studio • SW New Construction – Residential – Mixed Fuel[23] • SW New Construction – Nonresidential – Mixed Fuel[24] • SW Plug Load and Appliances[25] • SW HVAC Upstream[26] • SW HVAC Quality Installation/Quality

[23] SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting system. Please refer to the Lead PA's Application for the vision, design, development, and intervention strategies for the respective Statewide Program.

[24] *See* n. 23.

[25] *See* n. 23.

[26] *See* n. 23.

EX02 TABLE 19: Residential – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Multifamily Space & Water Heating Controls • Multifamily Whole Building Program (RA)	• Multifamily Whole Building Program (Equity)[22]	Management (QI/QM) Program[27]

B. Commercial Sector

Southern California, specifically the SoCalGas service area, includes a very large commercial market due to the large, vibrant, and diverse Southern California economy. As we move to the post-pandemic stage, the outlook of the commercial sector is filled with positive change. The California economy still ranks as one of the top economies in the world.[28] While the migration patterns are still in flux, more assets are focused on wellness, flex spaces, and the environment. While different building owner types, such as leased spaces and class B office spaces, need to transition to other types of functions, California's commercial sector is prime to overcome any change. Innovative opportunities to capture fugitive methane such as in the foodservice segment can advance energy efficiency and environmental solutions. SoCalGas's various innovative solutions are in lockstep to overcome commercial change and progress.

SoCalGas has approximately 163,000 commercial customers that collectively consume over 867 million therms of natural gas in 2021. Small businesses make up 99% of the commercial sector, and they consume 53% of all natural gas for this sector. The total commercial sector usage represents approximately 16% of the total SoCalGas program-eligible energy usage. The commercial energy efficiency sector portfolio offers California's commercial customers a statewide-consistent suite of products and services to overcome the market barriers to optimized energy management. The sector targets integrated energy management solutions through strategic energy planning support, technical support services, such as facility audits and calculation and design assistance, and financial support through rebates, incentives, and financing options. Targeted end-users include all commercial segments such as distribution/tech warehouses, mixed-use office buildings, hospitality, labs, motels, trans-oriented buildings, restaurants, private schools, trade schools, private hospitals, retail facilities, entertainment centers, and smaller customers with similar buying characteristics.

[22] *See* n. 23.
[27] *See* n. 23.
[28] Vekshin, A. (June 14, 2016). California overtakes France to become sixth-largest economy. *Bloomberg, L.P.*, *available at* https://www.bloomberg.com/politics/articles/2016-06-14/california-overtakes-france-to-become-sixth-largest-economy.

The commercial sector strategies consist of financial incentives, comprehensive direct install, retro-commissioning, behavioral changes, strategic energy management, midstream, and upstream offerings through local and statewide programs.

1. Sector-specific goals, objectives, and strategies

SoCalGas seeks to influence the commercial building environment by creating impactful solutions that stimulate the economy, are sensitive to the environment, and are valued by customers.

State goals must be addressed statewide and supported with local solutions, strategic collaboration, and cost-effective implementation. Some examples of initiatives and legislation that require effective implementation and collaboration include:

- All major renovations of existing commercial buildings reach ZNE goal by 2030
- Assembly Bill (AB) 758 – Implementing the Existing Buildings Action Plan
- Senate Bill (SB) 350 – Clean Energy and Pollution Reduction Act of 2015

With state goals in mind, the commercial sector goals focus on increasing energy efficiency levels of all customers across all commercial segments by focusing on customer needs and expectations and reducing market barriers. The table below highlights the four overarching commercial sector goals and their corresponding measurable outcomes.

EX02 TABLE 20: Commercial Sector - Goals & Objectives

Sector Goals	Objectives
Increase energy efficiency adoption levels of equity-classified and small customer groups.	Achieve greater program participation from equity-classified and small customer groups.
Facilitate customers' transitions to decarbonization by increasing energy efficiency and promoting other decarbonization solutions with a particular focus on disadvantaged communities.	Achieve greater energy savings from all commercial segments by 50% over 2015 by 2030 and facilitate greater adoption of other decarbonization solutions such as fuel cells, renewable natural gas (RNG), hydrogen and other emerging decarbonization solutions.
Expand behavior and operational-based intervention programs that promote energy efficiency and decarbonization.	Gain regulatory pathway and promote more operational and behavior-based interventions, including Strategic Energy Management (SEM).
Leverage existing trained represented labor resources to help energy efficiency programs deliver services safely and reliably to small commercial customers.	Provide access to a uniquely trained workforce that programs can leverage to increase delivery efficiency and maintain safe and reliable installations for small commercial customers.

2. Challenges and Outcomes

The commercial sector has unique challenges that limit customers from realizing greater levels of energy efficiency. The challenges faced by the commercial sector and corresponding expected outcomes resulting from reducing these market barriers are shown below.

EX02 TABLE 21 – Commercial Sector – Challenges & Outcomes

Sector Challenges	Expected Outcomes
Varied and unique segments with specific needs make it challenging to offer a standard program that fits the needs of all customers.	Increased customer adoption of energy efficiency solutions across all customer segments and sizes with a focus on those with untapped energy efficiency potential.
The commercial sector is trending towards more leased properties, creating a larger split incentive barrier between owners and tenants.	Increased energy efficiency levels in commercial leased properties.
Limited awareness by contractor community of available energy efficiency solutions and programs for their customers.	Increased knowledge of the contracting community of energy efficiency products and programs that enable greater customer adoption of higher efficient equipment.
Need for safe, quality installations in the small commercial customer groups.	Increased access to a uniquely trained workforce that can perform safe, quality installations for small commercial customers.
Sustainability initiatives are often addressed as siloed activities that can deprioritize wholistic solutions that maximize energy, water, non-energy benefits, and emissions savings.	Increased level of wholistic sustainable/regenerative interdisciplinary program solutions that encompass renewable energy, energy/water efficiency, sustainable building, program revitalization, urban agriculture, landscape science, waste management, and transportation planning through integrated technical assistance, outreach and education.
Pandemic continues to present challenges, including access to customer sites and obstacles to traditional M&V.	Increased number of offerings and options that address market access and wellness issues presented by an ongoing pandemic.

3. Strategies

SoCalGas will rely on a combination of existing, proven strategies and new, innovative program strategies to arrive at a complete energy efficiency solution set for the commercial customer. These proven and new program strategies will be introduced to the customers over time and may be withdrawn and retooled to adapt to dynamic market changes and ongoing modifications to regulatory program policies. As with most program areas, SoCalGas seek

creative and innovative designs from the third-party community to build a complete sector solution strategy. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 22: Commercial Sector – Intervention Strategies

Intervention Strategy	Descriptions	Tactics
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.	• Public agencies and municipalities (AQMDs, POUs, water agencies) • Industry (Contractors, Trade Associations, Advocates)
Intelligent Outreach	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery and provide deeper, comprehensive energy savings solutions.	• Data Analytics • Customer Targeting • Propensity Modeling • Data Sharing • Customer Outreach and Awareness • Online Marketplace Website
Energy Audits	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, segment-specific benchmarking, and provide deeper, comprehensive energy savings solutions.	• Virtual Energy Audits • Energy Audits • Energy Management Technologies • Industry Best Practice Sharing
Technical Assistance	Provide education and training to property owner or key facility personnel on energy efficiency practices and supplemental assistance in energy efficiency project development and implementation for individual customer projects. Provide integrative sustainability assistance (e.g. technical assistance, education, project optimization) through Sustainable Studio to customers, trade professionals and stakeholder organizations that include all aspects of demand side management (energy efficiency, water, emission, sustainability, renewables, and decarbonization).	• EE Project Management • Engineering Support • Single-Point-of-Contact • Design Assistance • Sustainable Studio

EX02 TABLE 22: Commercial Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Customer Incentives	Facilitate customer choice by offering a simplified suite of financial incentives strategies to reduce the high first cost barrier, the key market barrier for most customers.	• Meter-based Incentives • Deemed Incentives • Custom Incentives • Bundled Measures • Tiered Incentives • Incentive Stacking
Behavioral, Operational, and Maintenance	Provide customer engagement to reshape customer energy usage through behavioral, -based solutions. Influence customer behavior, operational. And maintenance changes related to energy consumption through various tactics such as comparative energy usage information.	• Retrocommissioning • Strategic Energy Management • Behavioral Modification • Modified Savings Analysis • Use of AMI Data • Cross-Promotion • Meter Large Projects • Cohorts • Awards & Recognition
Direct Install	Provide direct installation of a comprehensive suite of energy and water efficiency solutions using contracted workforce to commercial customers of all segments, with a particular focus on disadvantaged communities.	• Standard Direct Install • Comprehensive Direct Install • Customer Co-Payments
Mid/Upstream Energy Efficiency	Provide incentives to manufacturers, distributors, and retailers to reduce the retail cost of energy efficiency equipment, promotes stocking of energy-efficient equipment, and informs the customer on the availability of efficient equipment at the midstream level.	• Mid/Upstream Incentives • Distributor Training
Financing	Provide various financing vehicles, including on/off bill repayment solutions, to encourage customers to adopt deeper, more comprehensive energy efficiency solutions.	• On-Bill Financing • On-Bill Repayment • Alternate Financing • Project Financing • Micro-loans

4. Sector-specific coordination (if needed)

The success of the commercial sector strategies will depend on positive, collaborative relationships with several market actors, Program Administrators, program providers, regulators, and other government entities. Above and beyond coordination with various market actors, SoCalGas maintains a long history of partnering with external stakeholders and sharing resources

to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the commercial sector.

EX02 TABLE 23: Commercial Sector - Partnering	
Partner / Leveraging	**Details**
Governments (Local, State & Federal)	SoCalGas will work with state and federal agencies to promote greater energy efficiency adoption throughout the various customer segments.
	Financing will be a key program intervention strategy to overcome the sector's high first cost of energy efficiency.
	SoCalGas will continue its long-term collaboration with CAEATFA to design and promote innovative financing strategies that encourage greater customer investment in energy efficiency.
Industry (Contractors, trade associations, advocates)	Commercial trade organizations can provide an effective path to commercial sector collaboration by serving as a trusted source of information about business concerns.
	Trade organizations can survey their membership to find common concerns and potential solutions. Understanding these concerns can help Program Administrators construct value propositions and tailor their program offerings to best serve these customers.
	Trade organizations have established communication channels with the industry that can facilitate the education of commercial customers about energy efficiency programs through a variety of forums including, social and print media, expos/trade shows, ad hoc round tables, and regular meetings.
	SoCalGas will collaborate with trade allies to increase program promotion and customer awareness of the benefits of energy efficiency investments.
	Specialized technical assistance with expertise in specific commercial segments can be highly effective in identifying energy savings opportunities at commercial facilities.
	The expertise can be provided by resources that include in-house utility experts, independent technical consultants, and equipment vendors.
Suppliers (manufacturers, distributors, retailers)	SoCalGas will actively work with equipment vendors and manufacturers to promote greater adoption of energy efficiency equipment among the various commercial segments.
POUs, AQMDs, Water Agencies, and Water Districts	Actively coordinate with POUs, AQMDs, and water agencies to deliver energy and water efficiency programs.
	Engage in partnerships and co-delivery arrangements with POUs and water agencies when there is a shared customer base (gas and electric) to simplify customer engagement and achieve higher levels of energy efficiency.
	Actively coordinate with special districts throughout California and other regions to share best program administration, design, and delivery practices.

Open and continuous collaboration is key to addressing the needs of commercial customers. SoCalGas will actively coordinate with all California Program Administrators to

increase customer awareness and enable customers to adopt energy efficiency solutions for their businesses. As the program portfolio administrator, SoCalGas will collaborate with its diverse third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the commercial sector, emphasizing those customers with high energy efficiency potential and smaller businesses who tend not to participate in programs.

EX02 TABLE 24: Commercial Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Deliver dual-fuel programs to reach more customers.
	Leverage all available best practices and promote statewide consistency, where appropriate.
	Simplify program engagement.
	Capture all energy efficiency benefits, including operational energy savings.
	Conduct market research to identify and understand unique barriers to energy efficiency investments.
	Promote other demand-side management opportunities, including cleaner renewables, digesters, carbon capture, fuel cells, etc.
Third-party Program Implementers	Solicit innovative programs and creative solutions from diverse third-party program implementers that can be implemented quickly and effectively.
	Continue collaboration with program implementers throughout the program's lifecycle.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to simplify program requirements and coordinate policies that will recognize all energy efficiency benefits associated with commercial sector energy efficiency programs.

5. Categorization by Segment

EX02 TABLE 25: Commercial Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Commercial-BEST (RA) • Small & Medium Commercial EE Program (RA)	• Commercial-BEST (Equity)29 • Small & Medium Commercial EE Program (Equity)30	• Nonresidential Energy Advisor Program • SW New Construction – Nonresidential – Mixed Fuel[31]

29 Program is formally categorized as resource acquisition but provides energy efficiency program activities to equity-classified customers.
30 Program is formally categorized as resource acquisition but provides energy efficiency program activities to equity-classified customers.
31 SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting

EX02 TABLE 25: Commercial Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Service RCx Large Commercial Program • Large Commercial Energy Efficiency Program • Nonresidential Behavioral Program • Strategic Energy Management • LADWP Direct Install • Nonresidential Calculated Incentives Program • Nonresidential Deemed Incentives Program • SW Foodservice POS • SW Midstream Commercial Water Heating		• SW HVAC Upstream • Sustainable Studio

C. Industrial Sector

Southern California, and specifically the SoCalGas service area, has been a prime industrial market primarily due to the proximity of the ports of Los Angeles and Long Beach. In recent years, the SoCalGas industrial sector has remained relatively stable. Aside from economic cycles and macro-economic trends, other key industrial market drivers include equipment efficiency code increases (boilers), flex spaces (adaptive reuse of industrial buildings such as the Los Angeles Arts District), emissions standards increases (NOx, GHG), state-specific legislation such as the passage of Assembly Bill (AB) 32, transportation and logistics (port congestion, E-commerce), and among many others.

SoCalGas's industrial customer sector represents nearly 38% of the natural gas consumed by all program-eligible customers. The industrial sector usage is dominated by a few very large customers that consume just over 82% of the natural gas within the industrial sector. SoCalGas has developed four distinct groupings of customer segments which are: refineries, food manufacturing and beverage, minerals/metals/plastics, and textiles/wood/paper/printing/others. Customer sizes can vary significantly within these unique groupings creating a much-diffused energy efficiency market. There are many untapped energy savings associated with customer

system. Please refer to the Lead PA's Application for the vision, design, development, and intervention strategies for the respective Statewide Program.

operations and practices changes. As we move forward with post-pandemic solutions, SoCalGas's industrial sector strategies will provide innovative solutions for our customers.

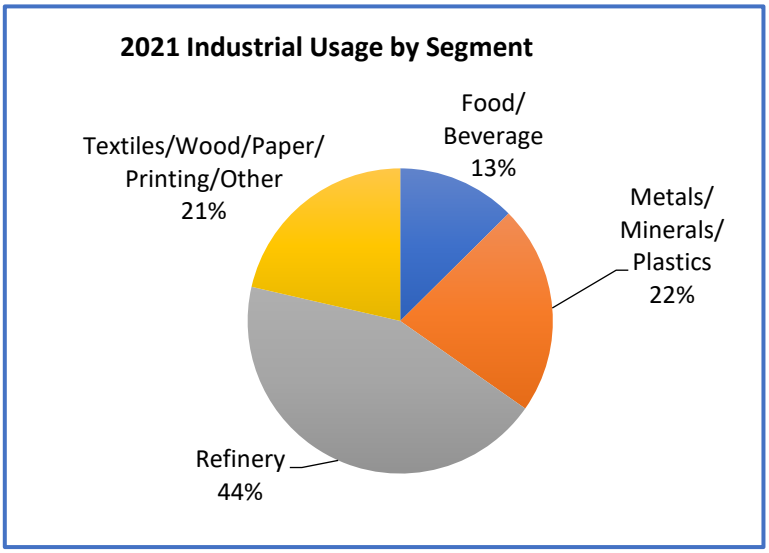
Ultimately, industrial customers fall into two distinct groups: customers who rely on natural gas as part of their industrial processes and those who have an energy consumption profile like a commercial customer. However, both groups face several obstacles in adopting greater levels of energy efficiency in their business operations. For example, many industrial processes operate at very high temperatures, making them significantly harder to decarbonize than end-use applications in other sectors. Furthermore, similar industrial facilities tend to be concentrated within a geographical area, forming an "Industrial Cluster" that allows a more targeted approach to influence and convert the entire cluster.

SoCalGas's industrial sector strategies provide services to improve the energy efficiency of industrial facilities throughout the SoCalGas service territory. The primary services offered to industrial customers include:

- Energy audits covering EE and demand management opportunities.
- Technical assistance in measure specification, procurement, and project management.
- Post-installation inspection and analysis to verify performance.
- Strategic energy management.
- Financial incentives and project financing for installed measures.

Financial incentives are based on deemed energy savings per unit of equipment and calculated energy savings per unit of energy.

SoCalGas has more than 16,000 industrial customers (93% classified as small and medium businesses) that collectively consume over two billion therms of natural gas in 2021.



1. Sector-specific goals, objectives, and strategies

The industrial sector offers an abundance of energy savings opportunities for the customer, including operational changes in production processes and improvements to operations

and maintenance practices. Specific program strategies are offered to customers to permanently capture these energy savings. According to an evaluation study prepared for the CPUC, SoCalGas's deemed and calculated industrial incentive programs rank first and second among 163 energy efficiency programs offered statewide based on the depth of retrofit and cost-effectiveness.[32] To encourage greater adoption of energy efficiency among small business owners, SoCalGas will offer simple, low-cost strategies that are tailored for smaller operations. To realize the vision for the industrial sector customers, SoCalGas has developed the following goals and measurable outcomes.

EX02 TABLE 26: Industrial Sector - Goals & Objectives

Sector Goals	Objectives
Increase adoption of energy efficiency and decarbonization solutions across all industrial segments.	Increase energy savings from targeted larger and medium-sized customer groups by 50% over 2015 levels by 2030.
Position behavior-based interventions such as SEM to facilitate permanent changes in practices that address energy efficiency, demand response, and decarbonization goals.	Expand the reach of SEM offerings by increasing the number of cohorts treated.
Participate in and drive the Industrial Cluster approach to further decarbonization goals by improving systemic efficiency, renewable heat, hydrogen, and carbon capture/utilization.	Achieve deep, comprehensive energy efficiency levels with significant carbon reductions utilizing the Industrial Cluster engagement method.

2. Challenges and Outcomes

Industrial customers fall into two distinct groups: customers who rely on natural gas as part of their industrial processes and those who have an energy consumption profile like a commercial customer. However, both groups face several obstacles in adopting greater levels of energy efficiency in their business operations.

SoCalGas will continue to collaborate and coordinate with its third-party program implementers and other Program Administrators to advance the portfolio goals, increase energy efficiency adoption, and avoid customer confusion regarding program offerings.

[32] Itron, Inc. (July 8, 2016). Comprehensiveness Analysis Report, Phase I, CALMAC Study ID CPU0146.01, *available at* http://www.calmac.org/publications/Comprehensiveness_Analysis_Report_-_Phase_I.pdf.

The challenges faced by the industrial sector and corresponding expected outcomes as a result of reducing these market barriers are shown below.

EX02 TABLE 27 – Industrial Sector – Barriers & Outcomes	
Sector Challenges	**Expected Outcomes**
Low adoption of energy efficiency solutions by equity-classified customers, including very small/ small customers.	Increased adoption of energy efficiency solutions by very small/ small industrial groups.
Current industrial-organizational practices do not realize the benefits of energy efficiency and non-energy benefits.	More permanent changes to customers' industrial practices that incorporate energy efficiency and non-energy solutions into the industrial-organizational practices.
Diffused industrial markets make it difficult and costly to convince diverse customer segments to pursue energy efficiency.	Increased energy efficiency adoption levels across all industrial segments utilizing the Industrial Cluster strategy where appropriate.
Lack of capital to pursue deeper, more comprehensive energy efficiency as capital projects in this sector tend to be very cost-intensive..	Increased access to EE financing vehicles and customer incentives resulting in deeper, more comprehensive EE projects.

3. Strategies

SoCalGas will rely on a combination of existing, proven strategies and new, innovative program strategies to arrive at a complete energy efficiency solution set for the industrial customer. These proven and new program strategies will be introduced to the customers over time and may be withdrawn and retooled to adapt to dynamic market changes and ongoing modifications to regulatory program policies. As with most program areas, SoCalGas will continue to seek creative and innovative designs from the third-party community to build a complete sector solution strategy. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 28: Industrial Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.	• Public Agencies and Municipalities (AQMDs, POUs, Water Agencies) • Industry (Contractors, Trade Associations, Advocates)

EX02 TABLE 28: Industrial Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Intelligent Outreach	Assist customers in identifying the greatest energy efficiency opportunities, improve efficiency in program delivery and provide deeper, comprehensive energy savings solutions.	• Industrial Clusters • Data Analytics • Customer Targeting • Propensity Modeling • Data Sharing • Customer Outreach and Awareness • Online Marketplace Website
Energy Audits	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, segment-specific benchmarking, and provide deeper, comprehensive energy savings solutions.	• Virtual Energy Audits • Energy Audits • Energy Mgmt. Technologies • Industry Best Practice Sharing
Technical Assistance	Provide education and training to property owner or key facility personnel on energy efficiency practices and supplemental assistance in energy efficiency project development and implementation for individual customer projects.	• EE Project Management • Engineering Support • Single-Point-of-Contact
Customer Incentives	Facilitate customer choice by offering a simplified suite of financial incentives strategies to reduce the high first cost barrier, the key market barrier for most customers.	• Meter-based Incentives • Deemed Incentives • Custom Incentives • Bundled Measures • Tiered Incentives • Incentive Stacking
Behavioral, Operational, and Maintenance	Provide customer engagement to reshape customer energy usage through behavioral, -based solutions. Influence customer behavior, operational. And maintenance changes related to energy consumption through various tactics such as comparative energy usage information.	• Retrocommissioning • Strategic Energy Management • Behavioral Modification • Modified Savings Analysis • Use of AMI Data • Cross-Promotion • Meter Large Projects • Cohorts • Awards & Recognition

EX02 TABLE 28: Industrial Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Direct Install	Provide direct installation of a comprehensive suite of energy and water efficiency solutions using contracted workforce to industrial customers of all segments, with a particular focus on disadvantaged communities.	• Standard Direct Install • Comprehensive Direct Install • Customer Co-Payments
Mid/Upstream Energy Efficiency	Provide incentives to manufacturers, distributors, retailers to reduce the retail cost of energy efficiency equipment, promotes stocking of energy-efficient equipment, and informs the customer on the availability of energy-efficient equipment at the midstream level.	• Mid/Upstream Incentives • Distributor Training • Online Marketplace
Financing	Provide various financing vehicles, including on/off bill repayment solutions, to encourage customers to adopt deeper, more comprehensive energy efficiency solutions.	• On-Bill Financing • On-Bill Repayment • Alternate Financing • Project Financing • Micro-loans

4. Sector-specific coordination (if needed)

The success of the industrial sector strategies will depend on positive, collaborative relationships with several market actors, Program Administrators, program providers, regulators, and other government entities. Above and beyond coordination with various market actors, SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the industrial sector.

EX02 TABLE 29: Industrial Sector - Partnering	
Partner / Leveraging	**Details**
Governments (Local, State & Federal)	SoCalGas will work with state and federal agencies to promote greater energy efficiency adoption throughout the various customer segments.
	SoCalGas will leverage its existing partnerships with local and state governments to develop and implement program strategies directed at smaller industrial customer groups.
	Financing will be a key program intervention strategy to overcome the sector's high first cost of energy efficiency.
Industry (Contractors, trade associations, advocates)	Industrial trade organizations can provide an effective path to industrial sector collaboration, mainly by serving as a trusted source of information about business concerns facing specific industrial segments.
	Trade organizations can survey their membership to find common concerns and potential solutions.

EX02 TABLE 29: Industrial Sector - Partnering	
Partner / Leveraging	**Details**
	Understanding these concerns can help program administrators construct value propositions and tailor their program offerings to best serve these customers.
	Trade organizations have established communications channels with the industry that can facilitate the education of industrial customers about energy efficiency programs through a variety of forums, such as social and print media, expos/conferences, ad hoc round tables, monthly meetings, and regional or national quarterly or annual meetings.
	SoCalGas will collaborate with trade allies to increase program promotion and customer awareness of the benefits of energy efficiency investments.
	Specialized technical assistance with expertise in specific industrial processes can be highly effective in identifying energy savings opportunities at industrial facilities.
	The expertise can be provided by resources that include in-house utility experts, independent technical consultants, and equipment vendors
Suppliers (manufacturers, distributors, retailers)	SoCalGas will actively work with equipment vendors and manufacturers to promote greater adoption of energy efficiency equipment among the various industrial segments.
POUs, AQMDs, Water Agencies, AQMDs, and Water Districts	Actively coordinate with POUs, AQMDs, and water agencies to deliver energy and water efficiency programs.
	Engage in partnerships and co-delivery arrangements with POUs and water agencies when there is a shared customer base (gas and electric) to simplify customer engagement and achieve higher levels of energy efficiency.
	Actively coordinate with POUs and water agencies throughout California and other regions to share best program administration, design, and delivery practices.

Open and continuous collaboration is key to addressing the needs of industrial customers. SoCalGas will actively coordinate with all California Program Administrators to increase customer awareness and enable customers to adopt energy efficiency solutions for their businesses. As the program portfolio administrator, SoCalGas will collaborate with its diverse third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the industrial sector, emphasizing those customers with high energy efficiency potential and smaller businesses who tend not to participate in programs.

EX02 TABLE 30: Industrial Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
	Deliver dual-fuel programs to reach more customers.

EX02 TABLE 30: Industrial Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Leverage all available best practices and promote statewide consistency, where appropriate.
	Simplify program engagement.
	Capture all energy efficiency benefits, including operational energy savings.
	Conduct market research to identify and understand unique barriers to energy efficiency investments.
	Promote other demand-side management opportunities, including cleaner renewables, digesters, carbon capture, fuel cells, etc.
Third-party Program Implementers	Solicit innovative programs and creative solutions from diverse third-party program implementers that can be implemented quickly and effectively.
	Continue collaboration with program implementers throughout the program's lifecycle.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to simplify program requirements and coordinate policies that will recognize all energy efficiency benefits associated with industrial sector energy efficiency programs.

5. Categorization by Segment

EX02 TABLE 31: Industrial Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Industrial Energy Efficiency Program[33] • Strategic Energy Management • Nonresidential Calculated Incentives Program • Nonresidential Deemed Incentives Program	• Industrial Energy Efficiency Program[34]	• Nonresidential Energy Advisor Program • SW New Construction – Nonresidential – Mixed Fuel[35]

D. Agricultural Sector

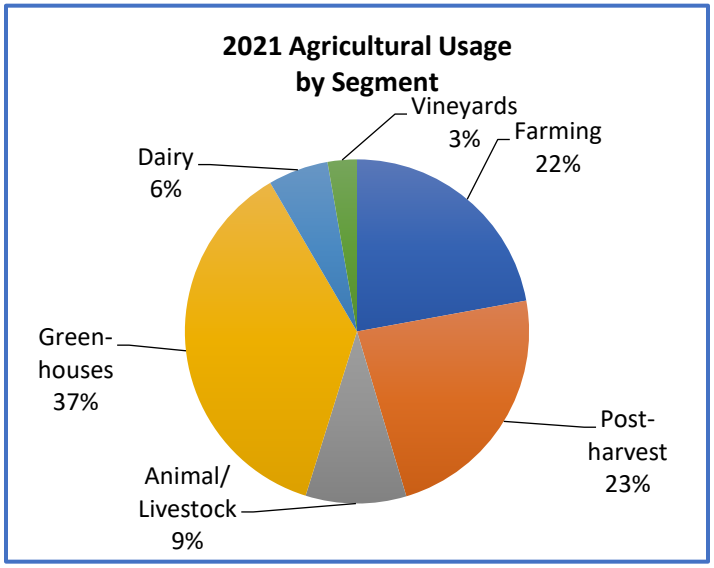
California's agriculture sector is diverse and robust, with each segment interlinked with the others in a network of common culture and commerce. Unlike the single crop monocultures of wheat and corn in the Midwest, the farmers and ranchers of California grow a multitude of crops – from alfalfa to zucchini – that provide the greatest agricultural bounty of any state in the

[33] The Industrial Energy Efficiency Program is a placeholder for SoCalGas's on-going industrial sector solicitations.
[34] The Industrial Energy Efficiency Program is a placeholder for SoCalGas's on-going industrial sector solicitations.
[35] SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting system. Please refer to the Lead PA's Application for the vision, design, development, and intervention strategies for the respective Statewide Program.

country. Although energy is an essential aspect of their business, the primary focus of the agricultural customers is on the health/yield of their crops and the efficient management of their land.

SoCalGas agricultural customers range from very small family farms to large commercial outfits and include greenhouses, wineries, dairy farms, urban farms, field crops, and more. The SoCalGas service territory encompasses the Lower San Joaquin Valley, Central Coast, and Southern California growing regions. Within this territory, SoCalGas has identified meaningful opportunities to change agricultural customer energy practices and behaviors to promote greater energy efficiency in agricultural segment-specific systems and processes. Many of these farms are also located in historically hard-to-reach, disadvantaged areas that require a more tailored approach in effecting these changes.

SoCalGas's agricultural sector strategies facilitate integrating energy-efficient solutions for its agricultural customers to decarbonize and protect the land. The sector offers a suite of products and services, such as strategic energy planning support, technical support services, facility audits, calculation/design assistance, financing options, and financial support through rebates and incentives. In addition, the sector advances the strategies and actions of the Agricultural and Industrial chapters of the CEESP and the Business Plan.[36]



The agricultural sector includes end-users such as irrigated agricultural growers (crops, fruits, vegetables, and nuts), greenhouses, on-site post-harvest processors (ginners, nut hullers, and associated refrigerated warehouses), and dairies. Due to North American Industry Classification System (NAICS) designations, food processors have traditionally received IOU services through the agricultural program offering. However, there are those facilities with on-site processing integrated with growers and their products, as with some fruit and vegetable processors (canners, dryers, and freezers), prepared food manufacturers, wineries, and water distribution customers that these program's offerings may address.

[36] CA Energy Efficiency Strategic Plan, Agricultural Sector, Section 5

In 2021, SoCalGas agriculture customers consumed approximately 98 million therms. The total agricultural sector usage represents approximately 2% of the total SoCalGas energy usage. Small and medium businesses/farms account for 83% of the agriculture customers, and they account for 13% of the natural gas consumption in this sector.

1. Sector-specific goals, objectives, and strategies

Within its territory, SoCalGas has identified opportunities to change agricultural customer energy practices and behaviors to promote greater energy efficiency in agricultural segment-specific systems and processes. SoCalGas has developed the following goals and measurable outcomes to realize the agricultural sector vision.

EX02 TABLE 32: Agricultural Sector - Goals & Objectives

Sector Goals	Objectives
Increase adoption of deeper, more comprehensive energy efficiency solutions by equity-classified customers (HTR, DAC, ESJ, underserved, rural) and smaller-sized customers.	Increase program participation of equity-classified and smaller-sized customers.
Encourage energy efficiency investment to lower operational costs, improve customer competitiveness, and support decarbonization.	Increase participation in energy efficiency programs by 50% over 2015 levels by 2030.
Pursue sustainability and decarbonization through integrated energy efficiency and decarbonization solutions among all agricultural customer segments.	Increase customer adoption of energy efficiency solutions that significantly reduce carbon emissions and encourage adoption of decarbonization solutions such as renewable natural gas, hydrogen, fuel cells and others.

2. Challenges and Outcomes

The agricultural sector has multiple barriers that can inhibit customers from realizing greater levels of energy efficiency. The challenges faced by the agricultural sector and corresponding opportunities to reduce market barriers are shown below.

EX02 TABLE 33 – Agricultural Sector – Challenges & Outcomes

Sector Challenges	Expected Outcomes
A considerable number of equity-classified agricultural customers, including smaller-sized customers, lack technical and financial resources to pursue energy efficiency. They also tend to have English as a second language and are located in remote rural areas, making them very hard to reach.	Increased deeper, comprehensive energy efficiency savings from equity-classified customers including smaller-sized customers.

EX02 TABLE 33 – Agricultural Sector – Challenges & Outcomes	
Sector Challenges	**Expected Outcomes**
The agricultural sector has competing priorities such as water scarcity, and crop yield, which may overshadow energy efficiency.	Increased investment in energy efficiency to lower operational costs and improve competitiveness.
A diverse agricultural sector base makes it difficult to offer programs that fit the needs of all customers.	Increased program participation across all segments within the sector.

3. Strategies

SoCalGas will seek new, innovative program strategies and rely on existing, proven strategies to arrive at a complete energy efficiency solution set for the agricultural customer. These proven and new program strategies will be introduced to the customers over time and may be withdrawn and retooled to adapt to dynamic market changes and modifications to regulatory program policies. As with most program areas, SoCalGas will seek creative and innovative designs from the third-party community to build a complete sector solution strategy. The new potential market intervention strategies and possible tactics are listed below.

EX02 TABLE 34: Agricultural Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.	• Public agencies and municipalities (such as AQMDs, POUs, Special Districts and Water Agencies) • Industry (Contractors, Trade Associations, Advocates)
Intelligent Outreach	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, and provide deeper, comprehensive energy savings solutions.	• Data Analytics • Customer Targeting • Propensity Modeling • Data Sharing • Customer Outreach and Awareness • Online Marketplace Website

EX02 TABLE 34: Agricultural Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Energy Audits	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, segment-specific benchmarking, and provide deeper, comprehensive energy savings solutions.	• Virtual Energy Audits • Energy Audits • Energy Mgmt. Technologies • Industry Best Practice Sharing
Technical Assistance	Provide education and training to property owner or key facility personnel on energy efficiency practices and supplemental assistance in energy efficiency project development and implementation for individual customer projects.	• EE Project Management • Engineering Support • Single-Point-of-Contact
Customer Incentives	Facilitate customer choice by offering a simplified suite of financial incentives strategies to reduce the high first cost barrier, the key market barrier for most customers.	• Meter-based Incentives • Deemed Incentives • Custom Incentives • Bundled Measures • Tiered Incentives • Incentive Stacking
Behavioral, Operational, and Maintenance	Provide customer engagement to reshape customer energy usage through behavioral-based solutions. Influence customer behavior, operational. And maintenance changes related to energy consumption through various tactics such as comparative energy usage information.	• Retrocommissioning • Strategic Energy Management • Behavioral Modification • Modified Savings Analysis • Use of AMI Data • Cross-Promotion • Meter Large Projects • Cohorts • Awards & Recognition
Direct Install	Provide direct installation of a comprehensive suite of energy and water efficiency solutions using contracted workforce to agricultural customers of all segments, with a particular focus on disadvantaged communities.	• Standard Direct Install • Comprehensive Direct Install • Customer Co-Payments
Mid/Upstream Energy Efficiency	Provide incentives to manufacturers, distributors, retailers to reduce the retail cost of energy efficiency equipment, promotes stocking of energy-efficient equipment, and informs the customer on the availability of energy-efficient equipment at the midstream level.	• Up/Midstream Incentives • Distributor Training • Online Marketplace

EX02 TABLE 34: Agricultural Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Financing	Provide various financing vehicles, including on/off bill repayment solutions, to encourage customers to adopt deeper, more comprehensive energy efficiency solutions.	• On-Bill Financing • On-Bill Repayment • Alternate Financing • Project Financing • Micro-loans

4. Sector-specific coordination (if needed)

The success of the agricultural sector Business Plan will rely on positive, collaborative relationships with several market actors, Program Administrators, program providers, regulators, and other government entities. Above and beyond coordination with various market actors, SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the agricultural sector.

EX02 TABLE 35: Agricultural Sector – Partnering	
Partner / Leveraging	**Details**
Governments (Local, State & Federal)	SoCalGas will work with local, state, and federal agencies to promote greater energy efficiency adoption throughout the various customer segments.
	SoCalGas will leverage its existing partnerships with local and state governments to develop and implement program strategies directed at smaller agricultural customer groups.
	Financing will be a key program intervention strategy to overcome the sector's high first cost of energy efficiency.
Industry (Contractors, trade associations, advocates)	Agricultural trade organizations and universities can provide a practical path to collaboration in the agricultural sector, particularly by serving as a trusted source of information about specific agricultural segments' business concerns.
	Trade organizations can survey their membership to find common concerns and potential solutions. Understanding these concerns can help Program Administrators construct value propositions and tailor their program offerings to best serve these customers.
	Trade organizations have established communications channels with the industry that can facilitate the education of customers about energy efficiency programs through a variety of forums, such as social and print media, ad hoc round tables, monthly meetings, and regional or national quarterly or annual meetings
	SoCalGas will collaborate with trade allies to increase program promotion and customer awareness of the benefits of energy efficiency investments.

EX02 TABLE 35: Agricultural Sector – Partnering	
Partner / Leveraging	**Details**
	Specialized technical assistance with expertise in specific agricultural segments can effectively identify energy savings opportunities at agricultural facilities.
	The expertise can be provided by resources that include in-house utility experts, independent technical consultants, and equipment vendors.
AQMDs, Water Agencies, and Water/Irrigation Districts	Actively coordinate with AQMDs and water agencies to deliver energy and water efficiency programs.
	Engage in partnerships and co-delivery arrangements with water agencies when there is a shared customer base to simplify customer engagement and achieve higher levels of energy efficiency.
	Actively coordinate with water agencies throughout California and other regions to share best program administration, design, and delivery practices.

Open and continuous collaboration is key to addressing the needs of the Agricultural customers. SoCalGas will actively coordinate with all California Program Administrators to increase customer awareness and adopt energy efficiency solutions for their farms and businesses. As the program portfolio administrator, SoCalGas will collaborate with its diverse third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the agricultural sector.

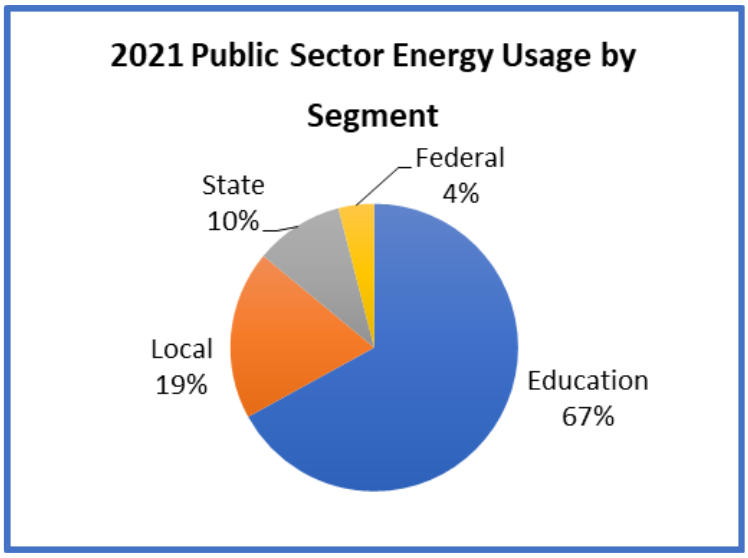
EX02 TABLE 36: Agricultural Sector – Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Deliver dual-fuel programs to reach more customers.
	Leverage all available best practices and promote statewide consistency, where appropriate.
	Simplify program engagement
	Capture all energy efficiency benefits, including operational energy savings.
	Conduct market research to identify and better understand unique barriers to energy efficiency investments.
	Promote other demand-side management opportunities, including cleaner renewables, digesters, carbon capture, fuel cells, etc.
Third-party Program Implementers	Continue to solicit innovative programs and creative solutions from diverse third-party program implementers that can be implemented quickly and effectively.
	Continue collaboration with program implementers throughout the program's lifecycle.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to simplify program requirements and coordinate policies that will recognize all energy efficiency benefits associated with agricultural sector energy efficiency programs.

5. Categorization by Segment

EX02 TABLE 37: Agricultural Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Agriculture Energy Efficiency Program • Nonresidential Calculated Incentives Program • Nonresidential Deemed Incentives Program	• Agriculture Energy Efficiency Program[37]	• Nonresidential Energy Advisor Program • SW New Construction – Nonresidential – Mixed Fuel[38]

E. Public Sector

Public sector customers are generally governed by a centralized decision-making authority uniquely positioned to transform their organization's decision-making processes. These structures are well-positioned to achieve deeper energy efficiency and adopt other demand-side management solutions (including clean renewables) to help reduce operational costs and environmental impacts in support of federal, state, and local mandates.



The public sector customers are essentially "tax-based" government organizations. Public sector customers are often subject to executive, legislative, and other mandates as taxpayer-funded entities. Public sector customers are generally characterized as: not profit-motivated, having fixed utility budgets, requiring a public process on key decisions, including funding and project approval, complex annual budget process approvals tied to a fiscal year rather than a calendar year, and required to follow unique prevailing wages and labor purchasing guidelines. These characteristics are unlike most commercial businesses.

The key function of the public sector is to provide services that benefit society, including public safety, public education, and maintaining public infrastructure. The public sector is

[37] The Agricultural Energy Efficiency Program is a placeholder for SoCalGas's on-going agricultural sector solicitations.

[38] SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting system. Please refer to the Lead PA's Application for the vision, design, development, and intervention strategies for the respective Statewide Program.

defined by four segments: local government, state government, the federal government, and public education. These segments contain many customer groups that can be further disaggregated by agency, department, or district affiliation (i.e., water, sanitation, and school districts).

In 2021, SoCalGas public customers consumed over 160 million therms, not including gas consumed for electric generation. SoCalGas's public sector represents nearly 16% of the natural gas consumed by all commercial customers[39] and approximately 3% of SoCalGas's total energy efficiency program-eligible customer load.

1. Public Sector Partnerships

SoCalGas has supported Public Sector Customers through Statewide Institutional Partnerships and Local Government Partnerships (LGPs). Over the past five years SoCalGas worked with partners to achieve energy savings and climate goals and learned valuable lessons to continue supporting Public Sector Customers. The objective for SoCalGas will continue is to reduce energy usage through facility and equipment improvements, share best practices, and provide education and training to key personnel within the territories covered by all IOUs.

2. Statewide Institutional Partnerships

In 2021, the Statewide Partnerships addressed programmatic challenges impacting energy efficiency projects at the campuses, water/wastewater and state facilities and providing a concentrated effort to support shared energy efficiency, decarbonization, and environmental goals. These Statewide Partnerships will be considered part of the public sector program portfolio. Through the business planning process, SoCalGas worked with partners to identify barriers and challenges facing higher education, municipal owned water/wastewater, and state agencies and included them in developing public sector strategies.

3. Local Government

Local governments are a distinct customer segment that operates with their unique challenges and needs related to energy efficiency. Local governments have a unique role as leaders in their communities. They can play a role as a delivery channel to help share core IOU programs with the communities and businesses they serve. Increasingly, local governments interpret their responsibility for community well-being to reduce GHG emissions, increase renewable energy usage, protect air quality, create green jobs, and make the community more livable and sustainable.

[39] Public sector customers have been traditionally covered in "commercial" market data.

SoCalGas supported local governments through LGPs in achieving their energy efficiency and climate goals. LGPs serve and support local governments by increasing energy efficiency in municipal facilities. They provide programs and services to local communities that can help them reduce operating costs and greenhouse gas emission levels through energy efficiency. SoCalGas worked with partners to identify challenges faced by local governments and included them in the development of public sector strategies.

4. Public Sector Regional Energy Pathways

In an effort to build on our successes and lessons with the LGP model, SoCalGas will update Public Sector partnering approaches to ensure we are providing valuable programs and services for all Public Sector customers. Going forward, SoCalGas will support Public Sector customers through the Regional Energy Pathways which replaced the LGP model.

The objective of this model is to maintain support for local government partners along with all Public Sector customers and allow for more flexible engagement that demonstrates the value of regional partnering while maintaining direct relationships with existing partners and implementers as well as developing new relationships with public agencies.

The Regional Energy Pathways program will be implemented by SoCalGas resources and external resources based throughout the service territory to expand knowledge of available energy efficiency resources and increase participation in programs offered by SoCalGas. Energy Pathways is a dynamic approach which utilize the experience of SoCalGas internal resources with experience supporting public sector customers, and work with local regional stakeholders (Regional Ambassadors) to implement regional plans. Regional Ambassadors throughout the SoCalGas territory will serve as an extension of SoCalGas helping to identify challenges and assist bringing solutions to customers.

5. Sector-specific goals, objectives, and strategies

EX02 TABLE 38: Public Sector - Goals & Objectives

Sector Goals	Objectives
Achieve comprehensive, deep energy efficiency levels among all public facilities to support the Commission's energy efficiency goals and advance California's decarbonization policies in buildings.	Increase public sector customer participation in energy efficiency as well as increased energy savings by 50% over 2015 levels by 2030.
Work with Public Sector customers to adopt long-term goals to incorporate energy efficiency into customer's organizational policies and practices.	Increase the number of policies that promote energy efficiency adoption.

EX02 TABLE 38: Public Sector - Goals & Objectives	
Sector Goals	**Objectives**
Ensure Public Sector agencies serving disadvantaged communities receive appropriate support to access and promote energy efficiency solutions to municipal, residential, and business customers.	Increase energy savings from public customers in rural and disadvantaged communities by 50% over 2015 levels by 2030.

6. Challenges and Outcomes

The public sector has unique challenges that limit customers from realizing greater levels of energy efficiency. The challenges faced by the public sector and corresponding expected outcomes resulting from reducing these market barriers are shown below.

EX02 TABLE 39 – Public Sector – Challenges & Outcomes	
Sector Challenges	**Expected Outcomes**
Pandemic-like events add to the existing challenges public sector customers had with limited staff and budget resources, which may have long-lasting impacts. Challenges range from schools closing to public hospitals being overwhelmed with patients and conditions which do not allow for energy efficiency projects.	Increased adoption of energy efficiency solutions by customers with significant energy efficiency potential to support decarbonization efforts in municipal-owned buildings.
Public sector-specific requirements (e.g., public contracting codes, sustainability goals, and centralized energy billing practices) create competing priorities.	Permanent modification to organizational practices to have customers automatically consider and adopt energy efficiency solutions by incorporating energy efficiency into the organization's energy mandates, policies, and procedures.
Low energy efficiency adoption levels indicate that public sector agencies serving rural and disadvantaged communities are particularly impacted.	Increased energy efficiency levels among public sector customers in rural and disadvantaged communities.
The consumer price index indicates possible inflation impacts related to products and services/project budget planning. This may directly impact the public sector as tax revenues decline or lag, thereby impacting operating budgets and participation in energy efficiency programs.	More funding options for customers, including On-Bill Financing and the Regional Energy Networks (RENs), and increased participation in financing.

7. Strategies

SoCalGas has served public sector customers for many years through its public energy efficiency programs, local government partnerships with cities and counties, state agencies through Statewide Partnerships, and higher education customers. SoCalGas will rely on a combination of existing, proven strategies and new, innovative program strategies to provide a complete set of energy efficiency solutions for the public customer. These strategies may be withdrawn and retooled to adapt to dynamic market changes and ongoing modifications to regulatory program policies. As with most program areas, SoCalGas will look to creative and innovative designs from the third-party community to build a complete sector solution strategy. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 40: Public Sector – Intervention Strategies

Intervention Strategy	Descriptions	Tactics
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.	• Ambassador Model • Local Community Organizations and Chamber Associations • Economic Development Collaboratives • Government (local, state, federal) • Education (Universities, Public K-12) • Industry (Contractors, Trade Associations, Advocates) • Public Agencies and Municipalities (AQMDs, POUs, Water Agencies) • Collaboration with RENs • Grant Opportunities • Regional Pathways
Intelligent Outreach	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, and provide deeper, comprehensive energy savings solutions.	• Data Analytics • Customer Targeting • Propensity Modeling • Data Sharing • Customer Outreach and Awareness

EX02 TABLE 40: Public Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Energy Audits	Assist customers in identifying the greatest energy efficiency opportunities, improve cost efficiency in program delivery, segment-specific benchmarking, and provide deeper, comprehensive energy savings solutions.	• Virtual Energy Audits • Energy Audits • Energy Mgmt. Technologies • Industry Best Practice Sharing
Technical Assistance	Provide education and training to property owner or key facility personnel on energy efficiency practices and supplemental assistance in energy efficiency project development and implementation for individual customer projects.	• EE Project Management • Engineering Support • Single-Point-of-Contact • Design Assistance
Customer Incentives	Facilitate customer choice by offering a simplified suite of financial incentives strategies to reduce the high first cost barrier, the key market barrier for most customers.	• Meter-based Incentives • Deemed Incentives • Custom Incentives • Bundled Measures • Tiered Incentives • Incentive Stacking
Behavioral, Operational, and Maintenance	Provide customer engagement to reshape customer energy usage through behavioral-based solutions. Influence customer behavior, operational. And maintenance changes related to energy consumption through various tactics such as comparative energy usage information.	• Retrocommissioning • Monitoring-Based Commissioning • Strategic Energy Management • Behavioral Modification • Modified Savings Analysis • Use of AMI Data • Cross-Promotion • Meter Large Projects • Cohorts • Awards & Recognition
Direct Install	Provide direct installation of a comprehensive suite of energy and water efficiency solutions using contracted workforce to public sector customers of all segments, with a particular focus on disadvantaged communities.	• Standard Direct Install • Comprehensive Direct Install
Mid/Upstream Energy Efficiency	Provide incentives to manufacturers, distributors, retailers to reduce the retail cost of energy efficiency equipment, promotes stocking of energy-efficient equipment, and informs the customer on the availability of energy-efficient equipment at the midstream level.	• Up/Midstream Incentives • Distributor Training

EX02 TABLE 40: Public Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Financing	Provide various financing vehicles, including on/off bill repayment solutions, to encourage customers to adopt deeper, more comprehensive energy efficiency solutions.	• On-Bill Financing • On-Bill Repayment • Alternate Financing • Project Financing • Public Funding Assistance

8. Sector-specific coordination (if needed)

The success of the public sector strategies will rely on positive, collaborative relationships with several market actors, Program Administrators, regulators, and other government entities. SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the public sector.

EX02 TABLE 41: Public Sector - Partnering	
Partner / Leveraging	**Details**
Community Organizations	Partner with Community-Based Organizations (CBOs) to reach customers in targeted communities to share information on available solutions from SoCalGas and third-party implementers to reach decarbonization goals.
Education (Universities, Public K-12)	Actively work with K-12 school districts to create and implement an energy efficiency retrofit plan that includes permanent behavioral changes to Capture deeper energy efficiency savings.
Governments (Local, State & Federal)	SoCalGas will leverage long-term partnerships with local and state governments to develop and implement program strategies to assist the broader local and state government public sector customers, including those who serve rural and disadvantaged communities.
	SoCalGas will work with state and federal agencies to promote greater energy efficiency adoption throughout the various customer segments.
	Financing will be a key program intervention strategy to overcome the high first cost of energy efficiency in the public sector. SoCalGas will also assist public customers in securing various grant application opportunities from CEC, DOE, etc.
Industry (Contractors, trade associations, advocates)	Specialized technical assistance with expertise in specific segments can be highly effective in identifying energy savings opportunities in facilities. In-house utility experts, independent technical consultants, and equipment vendors can provide this needed expertise.
Suppliers (manufacturers, distributors, retailers)	SoCalGas will actively work with equipment vendors and manufacturers to promote greater adoption of energy efficiency equipment among the various public segments.

EX02 TABLE 41: Public Sector - Partnering	
Partner / Leveraging	**Details**
POUs, Water Agencies, and Water Districts	Continue to actively coordinate with POUs and water agencies to deliver energy and water efficiency programs effectively.
	Engage in partnership and co-delivery arrangements with POUs and water agencies when there is a shared customer base (gas, electric) to simplify the customer engagement and achieve higher levels of energy efficiency.
	Coordinate with POUs and water agencies throughout California and other regions to share best program administration, design, and delivery practices.
Air Quality Districts	Collaborate with regional AQMDs energy GHG reduction, and environmental justice programs that involve local governments and/or Council of Governments.
	Coordinate joint efforts to promote valuable customer resources, such as Energy Data Request Program community-wide aggregated consumption data for GHG planning, energy reduction, and customer assistance programs.
	Evaluate potential partnerships in sub-sector programs such as Clean Air Programs for Elementary Schools prioritized environmental justice communities that are the most impacted by air pollution.
Grant Opportunities	Promote grants to all cities and counties such as SoCalGas' Adaptation & Resiliency Grant Program to help local governments plan for extreme weather events.
	Promote collaboration between 501c3 and cities/counties to apply for SoCalGas Environmental Champions Grant proposals with innovative projects in the areas of clean air, clean energy, and organic waste diversion to biogas.
	SoCalGas to seek solicitation of grant opportunities from CEC, DOE, etc., that apply to the Public Sector and sub-sectors.

Open and continuous collaboration is key to addressing the public customers' needs. SoCalGas will actively coordinate with all Program Administrators to increase e customer awareness and adopt energy efficiency solutions. As the program portfolio administrator, SoCalGas will collaborate with its third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the public sector.

EX02 TABLE 42: Public Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Deliver dual-fuel programs to reach more customers.
	Leverage all available best practices and promote statewide consistency, where appropriate.
	Simplify program engagement.

EX02 TABLE 42: Public Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
	Capture all energy efficiency benefits, including operational energy savings.
	Conduct market research to identify and understand unique barriers to energy efficiency investments.
	SoCalGas will continue its collaboration and coordination with RENs to offer complimentary energy efficiency program offerings.
	Ensure minimal regional REN program overlap and duplication of services.
Third-party Program Implementers	Solicit innovative programs and creative solutions from third-party program implementers that can be implemented quickly and effectively.
	Continued collaboration with program implementers throughout the program's lifecycle will be an integral part of the program's success.
	Coordinate with existing IOU Statewide program Leads for customer outreach of SW programs.
	Strategize with third party vendors handling local EE programs to coordinate customer communications and outreach.
	Coordinate with local government organizations, institutional agencies, sector associations, and industries for local program outreach.
Clean Energy Programs	Support customer's sustainability and climate goals in coordination with Demand Side Management (DSM) programs that are promoting decarbonizations solutions such as renewable natural gas, hydrogen and others.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to simplify program requirements and coordinate policies that will recognize all energy efficiency benefits associated with public sector energy efficiency programs.

9. Categorization by Segment

EX02 TABLE 43: Public Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Public Direct Install Program • Large Public Sector EE Solicitation[40] • Nonresidential Calculated Incentives Program • Nonresidential Deemed Incentives Program	• Public Direct Install Program[44]	• Nonresidential Energy Advisor Program • REN Fiscal Management & Coordination • Regional Energy Pathways • SW New Construction – Nonresidential – Mixed Fuel[45]

[40] The Large Public Sector EE Solicitation is a placeholder for SoCalGas's on-going solicitation.
[44] The Public Direct Install Program is a placeholder for SoCalGas's on-going solicitation.
[45] *See* n. 41.

EX02 TABLE 43: Public Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• SW Institutional Partnership – Government[41] • SW Institutional Partnership – Colleges[42] • SW Water & Wastewater Pumping[43]		

F. Cross-Cutting Sector Finance Sector

The finance sector will continue to promote greater levels of adoption for more comprehensive energy efficiency solutions for customers. The energy efficiency finance sector offerings will include financing options for owners and renters of single-family 1-4 units and multi-family residential customers, small businesses, and broader nonresidential customers. In conjunction with CPUC's Clean Energy Financing Options Order Institute Rulemaking (R.20-08-022), SoCalGas's future offerings will support all types of demand-side investments, including energy efficiency, demand response, distributed generation, customer microgrids and energy storage to advance cleaner energy solutions for customers. In R.20-08-022, SoCalGas will seek to expand eligible technologies for on-bill financing, on-bill repayment, and other financing mechanisms as well as expand some of these financing offerings to residential customers.

The energy efficiency finance sector strategies will be seamlessly integrated with other energy efficiency programs to provide customers with comprehensive solutions in a simple, easy approach through innovative online and handheld technologies to enable greater customer participation throughout the program portfolio. Customers will be eligible to receive financing and program rebates or go through the finance-only path for loans over $250,000. Overall, the new energy efficiency finance offerings are designed to:

Vision: Customer adoption of deep, comprehensive energy-efficient solutions for their homes and businesses through innovative and affordable financing options promoted by the contractor community and supported by the financial industry.

[41] SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting system. Please refer to the Lead PA's Application for the vision, design, development, and intervention strategies for the respective Statewide Program.
[42] *See* n. 41.
[43] *See* n. 41.

1. Sector-specific goals, objectives, and strategies

The energy efficiency finance vision, goals, and objectives set the tone and direction for the next generation of energy efficiency finance offerings. The financial offerings rely on commission policies, legislative directives, customer needs, industry trends, and stakeholder input. Thus, the following goals are part of a longer-term strategy where SoCalGas intends to deliver positive, measurable outcomes.

EX02 TABLE 44: Finance Sector - Goals & Objectives

Sector Goals	Objectives
Build, enable, and maintain greater, broader, and/or more equitable access to capital and to increase the affordability of and investment in energy efficient projects, products, or services.	Increase program participation by business and multi-family customers, including Equity-classified customers, by increasing loan limit from $100k to $250k to encourage deeper energy savings and comprehensive retrofits. Increase nonresidential customer participation in On-Bill Financing by removing bill neutrality requirement.
Attract private capital to expand reach of energy efficiency options to customers and help scale participation in programs.	Attract more lenders and increase GoGreen[46] Financing program participation including On-Bill Repayment.
Reach a broader set of customer groups (e.g., Disadvantaged Communities, historically low energy efficiency adoption rates) and market segments.	Create awareness and educate customers of energy efficiency financing options and their benefits annually

2. Challenges and Outcomes

SoCalGas faces several challenges regarding ensuring the financing of its energy efficiency goals. The challenges faced by the Finance sector and corresponding expected outcomes resulting from reducing these market barriers are shown below.

EX02 TABLE 45 – Finance Sector – Challenges & Outcomes

Sector Challenges	Expected Outcomes
Underserved customers (i.e., HTR, DAC, low credit score) have challenges securing loans for energy efficiency projects.	Provide access to finanicn through programs like GoGreen Financing. Develop additional financing programs with private capital partners where applicable.
Long-lead time required for project pre-approval and loan disbursement.	Integrated financing options with program services to provide a seamless process. Remove wet-signature requirements and introduce electronic signatures for loan agreements.

[46] Go Green Financing, *available at* Homepage | GoGreen Financing.

EX02 TABLE 45 – Finance Sector – Challenges & Outcomes	
Sector Challenges	**Expected Outcomes**
For certain financing programs, customer or contractor must front the upgrade cost and wait for reimbursement after project completion.	Educate contractors on the requirements upfront for different financing options to prepare when presenting solutions to customers. Integrate financing options with energy efficiency programs.
Institutional customers often require board approval to secure financing, which leads to added delays.	Increased promotion of program benefits and requirements for board approval.
Contractors may lack expertise in estimating energy savings calculations to determine payback calculations.	Improvement to contractors' expertise through training sessions with SoCalGas to review savings methodology.

3. Strategies

SoCalGas has served its customers by providing energy efficiency financing programs for many years. SoCalGas will rely on a combination of existing, proven strategies and new, innovative program strategies to arrive at a complete energy efficiency solution set in the Finance sector. The proven and new program strategies will be introduced to the customers over time and may be adjusted to adapt to dynamic market changes and ongoing modifications to regulatory program policies. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 46: Finance Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Program Coordination	Cross-promote and integrate energy-efficiency offerings with financing options across sectors with respect for the primary end-user customer, to know the totality of SoCalGas' value-added programs. Actively coordinate with Program Administrators to bring financing options into portfolio programs. Collaborate with third-party implementers to assist customers with overcoming cost barrier to energy efficiency.	d. Integrate financing options with energy efficiency programs e. Collaborate with third-party implementers on incorporation of financing

EX02 TABLE 46: Finance Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners.	• Public agencies and municipalities (AQMDs, POUs, water agencies) • Industry (Contractors, Trade Associations, Advocates)
Education & Training	Generate awareness and understanding of financing options to drive customer participation.	• Contractor Training • Retailer Training
Technical Assistance	Provide technical assistance to help customers maximize financing options along with energy efficiency interventions' scope and depth.	• Financing Assistance • Loan Application Support • Loan Awareness
Financing	Provide various financing vehicles, including on/off bill repayment solutions, to encourage customers to adopt deeper, more comprehensive energy efficiency solutions.	• Credit Enhancements • On-Bill Financing • On-Bill Repayment • Alternate Financing • Project Financing

4. Sector-specific coordination (if needed)

The success of the Finance sector strategies will depend on positive, collaborative relationships with several market actors, Program Administrators, regulators, and other government entities. SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the Finance sector.

EX02 TABLE 47: Finance Sector - Partnering	
Partner / Leveraging	**Details**
Financial Institutions	Continue working and attract private capital partners to provide make more funding available to customers.
Governments (Local, State & Federal)	Work with SoCalGas public sector offerings to promote 0% financing as a tool to encourage energy efficiency projects.
	Collaborate with CAEATFA and other government agencies to advance GoGreen and other financing vehicles.
Industry (Contractors, trade	Participate in annual industry conferences and opportunities to present financing options available to customers.
	Promote financing programs and options in industry, trade allies, and association newsletters when available.

EX02 TABLE 47: Finance Sector - Partnering	
Partner / Leveraging	**Details**
associations, advocates)	
POUs, AQMDs Water Agencies, and Water Districts	Promote GoGreen Financing programs through POU's website and partner on outreach efforts.
	Work with POUs, i.e., LADWP, to incorporate financing on their Marketplace and energy efficiency sites.

Open and continuous collaboration is key to the success of the finance sector. SoCalGas will actively coordinate with all California Program Administrators to increase customer awareness and adopt energy efficiency solutions. As the program portfolio administrator, SoCalGas will collaborate with its third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the finance sector.

EX02 TABLE 48: Finance Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Deliver dual-fuel programs to reach more customers.
	Leverage all available best practices and promote statewide consistency, where appropriate.
	Simplify program engagement.
	Capture all energy efficiency benefits, including operational energy savings.
	Conduct market research to identify and understand unique barriers to energy efficiency investments.
Third-party Program Implementers	Collaborate with program implementers to promote financing offerings (e.g., Use 0% financing as a tool to close more projects).
	Coordinate with PAs to promote energy efficiency financing to customers.
	Provide necessary complimentary market support to deploy education, training, outreach, and customer recruitment activities efficiently and effectively.
Cross-Segments	Coordinate with all resource acquisition, equity, and other market support segments to maximize presence and access to energy efficiency financing.
Other DSM and Clean Energy Programs	Expand SoCalGas financing offerings to other clean energy technologies. As authorized, direct customers to other market support resources that promote other demand-side management programs and accelerate the State's progress toward clean energy goals.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to advance financing to allow customers higher levels of energy efficiency.

5. Categorization by Segment

EX02 TABLE 49: Finance Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
		• On-Bill Financing • GoGreen Financing

G. Cross-Cutting: Workforce Education, Training, and Outreach Sector

The Workforce Education, Training and Outreach (WET&O) sector represents a portfolio of education, training, and collaborative engagement between the IOUs and other stakeholders involved in energy education, training, and outreach at all points of the market channel. SoCalGas WET&O targets a workforce of new and existing energy efficiency trade professionals, allies, as well as market channel and other customer intermediaries using a variety of market support interventions.

1. Sector-specific goals, objectives, and strategies

WET&O involves a coordinated working relationship between stakeholders, collaborators, and service providers. SoCalGas will work with public and private industry sectors to find new approaches, or advance existing means to provide beneficial value to the energy efficiency portfolio efforts. To accomplish this, SoCalGas has listed these sub-sector goals.

EX02 TABLE 50: WET&O Sector - Goals & Objectives	
Sector Goals	**Objectives**
Engage and motivate trade professionals, allies, market channel and customer intermediaries with resources, data, and innovative ways to optimize supply chains with energy efficiency products.	Increase the number of market support events, channel engagements and collaborations with trade professionals, allies, market channel and customer intermediaries.
Repurpose energy efficiency education and training content to reach more trade professionals, allies, market channel and customer intermediaries with convenient and timely access to instructional curriculum.	Increase the number of trade professionals, allies and other market channel and customer intermediaries participating in market support education, instructional and training programs.
Enhance and sustain strategies to enroll disadvantaged workers in education and training programs, and outreach to them about career pathways that support California's clean energy goals.	Increase percentage of disadvantaged workers - trade professionals and allies meeting the disadvantaged worker definition – preferably residing in DACs and serving Hard-to-Reach (HTR) customers.
Inform and distribute collateral focused on emerging clean energy initiatives, technologies, and transition to decarbonization to trade professionals, allies	Increase number of trade allies and market channel intermediaries reached and informed on the latest advanced decarbonization energy efficiency developments.

and market channel and customer intermediaries.	

2. Challenges and Outcomes

SoCalGas faces several challenges related to ensuring that its trade and market channel allies are reached with the most comprehensive education, market information, resources and training instruction for responding to the state's mission of greater decarbonization, clean energy and energy efficiency. The challenges faced by the sector and corresponding expected outcomes resulting from reducing these market barriers are shown below.

EX02 TABLE 51 – WET&O Sector – Challenges & Outcomes

Sector Challenges	Expected Outcomes
Motivating and engaging trade professionals, allies, market channel and customer intermediaries to prioritize installation of energy-efficiency technology and products, particularly to HTR customers and DACs.	Increased market support incentives to trade professionals, allies, market channel and customer intermediaries to stimulate to generate greater attention on the potential for upselling and cross-selling of complementary program services, technologies, and solutions through energy efficiency engagement.
All trade and market channel allies are increasingly busy and more mobile, requiring more use of innovative technology to reach them with education, training, and instructional curriculum.	Increased channels for trade professionals, allies, market channel and customer intermediaries to access education and instructional content that can better help with informing end-use customers.
Trade allies and market channel participants are more attracted to financial benefits moreso than non-financial benefits for serving HTR customers and DACs.	Increased market support for generating interest in equitable, non-financial and decarbonization benefits from delivery of customer-centric solutions to HTR customers in DACs.
Ensuring market driven trade professionals, allies, market channel and customer intermediaries are properly informed on energy efficiency financial, technical and market support resources.	Increased number of informed trade professionals, allies, market channel and customer intermediaries equipped to respond to demand for customer preferred or customer-centric energy efficiency solutions.

3. Strategies

SoCalGas will rely on a combination of existing, proven and new innovative program strategies to arrive at a complete energy efficiency solution for our targeted audiences. The proven and new program strategies will be introduced incrementally to respective trade professionals, allies, market channel and customer intermediaries over time and may be withdrawn and retooled to adapt to dynamic market changes and ongoing modifications to regulatory program policies. As with most program areas, SoCalGas will look to creative and

innovative designs from the third-party community to build a complete sector solution strategy. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 52: WET&O Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Program Coordination	Cross-promote energy-efficiency offerings across sectors with respect for the primary end-user customer, to know the totality of SoCalGas's value-added programs and offer finance where possible (or connect customers to financing when possible). Actively coordinate with Program Administrators to support statewide program activities, shared customer base, and program policies. Collaborate with third-party implementers to assist them achieve program goals and objectives.	• Exchange and share market developments with Program Administrators • Leverage work of Third-Party Implementers
Partnering	Partner with external stakeholders, deployed on an as-needed basis and intended to: increase the number of customer contacts, increase the number of customers adopting energy efficiency; promote deeper, comprehensive energy efficiency; simplify customer engagement; and reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners	• Public agencies and municipalities (AQMDs, POUs, water agencies) • Industry (Contractors, Trade Associations, Advocates) • Retailers and distributors of custom foodservice equipment) • Community-based organizations and non-profits

EX02 TABLE 52: WET&O Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Education & Training	Deploy timely, targeted, and relevant education and training on new, existing, and emerging energy-efficiency technology solutions to trade professionals, allies, market channel and customer intermediaries. Integrate messaging of other decarbonization solutions (e.g., renewable natural gas, hydrogen, power to gas) with energy efficiency where possible, for example through facilitation of virtual and facility-site tours at the Energy Resource Center. Offer a diversified training portfolio on clean energy, and efficiency products that includes seminars, webinars, workshops, forums, and on-demand classes to trade professionals, allies & customer intermediaries. Cross-promote & facilitate energy education classes with nationally recognized industry training organizations. Provide training and informational sessions on emerging high-efficiency and decarbonization gas equipment.	• On-demand Trade Professional Training • SoCalGas Food Service Equipment Center • Trade Ally targeted customer campaigns • Mobile application tools • Market channel enticements • Expanded customer intermediary outreach • Retailer market support • Cross-promote through marketing materials, website, portal
Intelligent Outreach	Accelerate an increase in the number of customers identifying energy efficiency opportunities by addressing inefficiencies in program delivery for achieving deeper, comprehensive energy savings solutions. Increase contractor awareness of energy efficiency programs via in-person/virtual and Trade Ally digital platform technologies. Additionally, create awareness via analytics, identify and create specific marketing campaign opportunities for attracting DAC/HTR contractors.	• Increase DAC and HTR analytics-based outreach • Collaborative market data sharing • Trade ally market surveys • Trade ally outreach and market connection portal

EX02 TABLE 52: WET&O Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Technical Assistance	Create awareness among trade professionals, allies, market channel and customer intermediaries of technical assistance resources available to them to understand the total benefits of energy-efficiency investment.	• Trade ally outreach portal • Industry EE Best Practices • On-demand educational videos (short and when needed)
Technology Demonstration and Testing	Promote the availability of experiencing energy efficiency technology to trade and customers, as well as ability to arrange technology test cases at the SoCalGas Energy Resource Center.	• SoCalGas Food Service Testing Lab • SoCalGas Water Heater Demo Lab • Approved equipment testing labs
Market Channel Incentives	Offer collaborative funding to intermediaries with influence to generate and accelerate trade professional and market ally participation in bringing decarbonization in delivery of energy efficiency to HTR and DACs	• Training incentives • Market campaign incentives • Decarbonization incentives

4. Sector-specific coordination (if needed)

The success of the WE&T sector strategies will depend on positive, collaborative relationships with trade professionals, allies, market channel and customer intermediaries, Program Administrators, regulators, and other government entities. SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the sector.

EX02 TABLE 53: WET&O Sector - Partnering	
Partner / Leveraging	**Details**
Community Based Organizations (CBOs)	Partner with CBOs to deliver potential energy-efficiency career pathways.
	Collaboration on delivery of education, training, outreach, and lead generation events.
Education (Universities, K-12)	Engage educational institutions to invest in the long-term success of energy efficiency education, training, and partnerships for delivering complementary market support.
	Continue to integrate energy-efficiency curriculum into post-secondary programs.

EX02 TABLE 53: WET&O Sector - Partnering	
Partner / Leveraging	**Details**
Governments (Local, State & Federal)	Leverage existing partnerships with local and state governments to assist in outreach to constituents and implementation of the program.
	Strategies to provide WET&O services to rural and Disadvantaged Communities.
Industry (Trade associations, market channel allies)	Partner with trade associations to identify disadvantaged workers for hire in response to customer demand for clean energy efficiency solutions.
	Develop collaborations to develop additional training channels to extend access to evolving energy resources and curriculums.
	Design market support incentive modes to encourage and motivate energy efficiency participation among trade professions and service HTR and DAC customers.
	SoCalGas will collaborate with trade and market channel allies and support industry events to increase program promotion and customer awareness of the benefits of energy efficiency investments.
	Leverage partnership with trade associations to increase targeted outreach to trade allies and customer intermediaries with direct access to end-use customers.
Suppliers (manufacturers, distributors, retailers)	Work with market channel allies in the supply channel to facilitate a skilled workforce, market, and trade ally capacity to meet customer demand and accelerate the State's progress toward clean energy goals.
POUs, AQMDS, Water Agencies, and Water Districts	Support partnerships with POUs, AQMDS, and Water Agencies to identify potential energy efficiency job training and collaboration opportunities for market ally education, training, outreach, and recruiting.

Open and continuous collaboration is key to the success of the WET&O sector. SoCalGas will actively coordinate with California Program Administrators to increase customer awareness on such issues as climate change and decarbonization as reasons for adopting energy-efficiency solutions. As the program portfolio administrator, SoCalGas will collaborate with its third-party program implementers to help them be successful in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the WET&O sector.

EX02 TABLE 54: WET&O Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators	Leverage all available best practices and promote statewide consistency, where appropriate.

EX02 TABLE 54: WET&O Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
(RENs, IOUs, CCAs)	
	Simplify program engagement among implementers for customers.
	Conduct market research to remove barriers to energy efficiency investments.
Third-party Program Implementers	Solicit for innovative programs and creative solutions from third-party program implementers that can be implemented quickly and effectively.
	Provide necessary complimentary market support to deploy education, training, outreach, and customer recruitment activities efficiently and effectively.
Cross-Sector	Coordinate with all sectors and segmentation activities (resource acquisition, equity, market support) to maximize presence and access to energy efficiency rebates, resources, and relevant offerings.
SW v Local	Manage statewide and local program implementation to ensure consistency, where appropriate.
	Simplify and ensure clear program distinctions.
Other DSM Programs	Coordinate with other DSM Programs that deliver decarbonization solutions that accelerate the State's progress toward clean energy goals, for example renewable natural gas and hydrogen, to form integrated solutions with energy efficiency.
Stakeholder Engagement	Work with the CPUC and other key stakeholders to identify ways to simplify program requirements and coordinate policies that will recognize all energy efficiency benefits associated with WET&O sector energy efficiency programs.

5. Categorization by Segment

EX02 TABLE 55: WET&O Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
• Education Outreach Program	• Energy Program Outreach • SW WE&T Career & Workforce Readiness Connections[47]	• Integrated Energy Efficiency Training • HERS Rater Training Advanacement • Retail Partnering Training Program • SW WE&T Career Connections[48]

[47] SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting system. Please refer to the Lead PA's Application for the vision, design, development, and intervention strategies for the respective Statewide Program.

[48] *See* n. 47.

H. Cross-Cutting: Emerging Technologies Sector

Well-performing technology is recommended for inclusion in IOU customer education and rebate programs for wide use by utility customers. The Statewide Emerging Technologies (ET) program supports the PAs' energy efficiency programs and helps California meet its energy efficiency goals by identifying and screening potential technologies, assessing them to validate performance and customer acceptance, performing in-situ demonstrations, gathering actionable information for use by energy efficiency programs and publishing the results of these activities. **Vision:** To anticipate the latest emerging gas technology trends and to quickly introduce innovative technologies to program implementors

1. Sector-specific goals, objectives, and strategies

ET itself is not a customer-facing program. ET supports the ambitious objectives in the California Strategic Plan and legislative initiatives by directly supporting ratepayer-funded programs. As a non-resource program, ET provides information to program managers and designers who ultimately decide which technologies to offer through incentive programs; these program managers also design market interventions to promote customer use of energy-efficient technologies. The following table provides the goals and objectives that support ET efforts.

EX02 TABLE 56: Emerging Technologies - Goals & Objectives

Sector Goals	Objectives
Provide energy efficiency programs with comprehensive set of suitable technology options that promote higher efficiency and decarbonization.	Develop Technology Priority Maps (TPMs), implement emerging technology projects, evaluate technologies and disseminate findings among stakeholders.
Ensure that Program Administrators receive actionable market information to inform program design and measure mix.	Develop TPMs that include delivering actionable information for program designers.
Advance commercialization of breakthrough efficient gas technologies by working with technology development partners and market actors to understand and overcome barriers.	Collaborate with development partners and market actors to identify the technology needs of the program portfolio and overcome barriers.

2. Challenges and Outcomes

Emerging technologies' efforts depend on technology developers and manufacturers to innovate, conduct research, design, and development (RD&D), and create new technologies and potential products for consideration in energy efficiency portfolios. The challenges faced by the ET sector and corresponding expected outcomes resulting from reducing these market barriers are shown below.

EX02 TABLE 57: Emerging Technologies – Challenges & Outcomes	
Sector Challenges	**Expected Outcomes**
Identifying emerging technologies measures to advance energy efficiency.	Enhanced and updated TPMS that lead to roadmaps for technologies.
Understanding how the market will respond to new measures.	Solicit and meet Program Administrator requests for additional market or customer research on emerging technology measures.
Advancing technologies suited for program portfolio programs.	Work with technology developers with products <1 year from commercialization, including new technology vendors, manufacturers, and entrepreneurs.
	Work with technology developers with products <5 years from commercialization, including CEC, universities, and colleges.

3. Strategies

For many years, SoCalGas has promoted emerging technologies to provide customers with increased levels of energy efficiency. SoCalGas will rely on a combination of existing, proven strategies and new, innovative program strategies to arrive at a complete energy efficiency solution set in the Emerging Technologies sector. The proven and new program strategies will be introduced to the customers over time and may be adjusted to adapt to dynamic market changes and ongoing modifications to regulatory program policies. The expected market intervention strategies and possible tactics are listed below.

EX02 TABLE 58: Emerging Technologies Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Technology Evaluation	Potential technologies are identified and reviewed for viable market demand, robust distribution and contractor channel to support the sales and installation of the technology, and sufficient producers of the technology to ensure product availability and customer choice. This includes a review of any publicly available research that has already been conducted and how that influences the need for additional research.	• Technology Priority Maps • Demonstration Projects • Emerging Technology Focused Pilots (ETFPs)
Dissemination	Outreach and educate the market and influence adoption with applicable industry groups.	• Industry Coordination • Program Outreach

EX02 TABLE 58: Emerging Technologies Sector – Intervention Strategies		
Intervention Strategy	**Descriptions**	**Tactics**
Technology Transfer	The intent of technology transfer is to shepherd high potential technologies through the early adoption phase of the project life cycle.	• Market and Implementation Planning • Measure Package Development • Program portfolio coordination

4. Sector-specific coordination (if needed)

The success of the Emerging Technologies sector strategies will depend on positive, collaborative relationships with several market actors, Program Administrators, regulators, and other government entities. SoCalGas maintains a long history of partnering with external stakeholders and sharing resources to achieve common goals that benefit mutual customers and constituents. The following tables present a list of key partners that SoCalGas will leverage to achieve the vision for the Emerging Technologies sector.

EX02 TABLE 59: Emerging Technologies Sector - Partnering	
Partner / Leveraging	**Details**
Communities & Customers	Partner with owners, tenants, property managers, third-party vendors to facilitate installation of emerging technologies
Education (Universities, K-12)	Collaborate with research and educational institutions, e.g., California Institute of Technology (Caltech), UCD Center for Energy Efficiency, California Lighting Technology Center, Western Cooling Efficiency Center, University of California Irvine, Cal Poly State University, and Lawrence Berkeley National Laboratories.
Governments (Local, State & Federal)	Collaborate with government initiatives such as DOE's First Look West (FLoW), Cleantech Open, CalSEED (California Sustainable Energy Entrepreneur Development).
Industry (Contractors, trade associations, advocates)	Partner with other industry organizations promoting decarbonization solutions, e.g. Consortium for Energy Efficiency (CEE), E Source, New Buildings Institute (NBI), American Council for an Energy-Efficient Economy (ACEEE), Electric Power Research Institute (EPRI), and Gas Technology Institute (GTI)
Suppliers	Collaborate with technology developers, technology financiers, and clean tech accelerators to accelerate the development and implementation phases of emerging technologies.

Open and continuous collaboration is key to the success of the Emerging Technologies sector. SoCalGas will actively coordinate with all California Program Administrators to increase awareness and adoption of emerging technologies. As the program portfolio administrator, SoCalGas will collaborate with its third-party program implementers to help them be successful

in program delivery and achievement. SoCalGas will continue to work collaboratively with all engaged stakeholders to refine policies that advance the adoption of energy efficiency in the emerging technologies sector.

EX02 TABLE 60: Emerging Technologies Sector - Coordination	
Coordination Area	**Coordination Themes / Strategies**
Program Administrators (RENs, IOUs, CCAs)	Coordinate with IOUs, other PAs, POUs, CEC, and Market Transformation Administrators to advance awareness and adoption of emerging technologies.
Third-party Program Implementers	Coordination and dissemination of technology evaluation results with third-party implementers.
Cross-Segment	Coordinate with all resource acquisition, equity, and other market support sectors to increase awareness and adoption of emerging technologies.
Other DSM	As authorized, direct customers to other market support resources that promote other demand-side management programs and accelerate the State's progress toward clean energy goals.
Stakeholder Engagement	SoCalGas will work with the CPUC and other key stakeholders to identify ways to advance emerging technology adoption.

5. Categorization by Segment

EX02 TABLE 61: Emerging Technologies Sector – Program Categorization		
Resource Acquisition	**Equity**	**Market Support**
		SW Gas Emerging Technologies

I. Cross-Cutting: Codes & Standards Sector

The statewide Codes & Standards sector plans are presented in PG&E's Energy Efficiency Business Plan. Pursuant to D.18-05-041, OP 53 SoCalGas's role in codes and standards is limited to only "transfer ratepayer funds to the statewide lead for codes and standards[.]"

V. PORTFOLIO MANAGEMENT

SoCalGas is committed to offering a balanced energy efficiency portfolio that addresses the objectives of each segment across all sectors. SoCalGas will look for new, innovative ways to meet its portfolio objectives, from leveraging the creative programs designed by the third-party implementer community to creating synergistic strategies through partnerships with other entities (*e.g.*, POUs, water agencies, labor unions, PAs).

As stated by the Commission, the utilities will focus more on their role as determiners of "need" and energy efficiency portfolio design, and less on their role as program designers and implementers. SoCalGas will still retain discretion in its portfolio with respect to the budget

allocations to each type of activity, based on the overall needs in its service territory. While retaining program administrative responsibilities such as customer interface, rebate processing, and contract management, SoCalGas will continue its role as a "collaborator" with third-party program providers, other Program Administrators, key market actors (*e.g.*, industry groups) and the customer. For example, collaboration will be necessary with program implementers during the program selection process including any necessary modifications to third-party program design to ensure the overall portfolio achieves SoCalGas's energy efficiency goals.

A. Customer Recruitment and Engagement

Individual programs will be proposed, designed, and implemented by third-party providers based on the program intervention strategies presented in the Business Plan. In order to provide an effective engagement platform to support the successful program implementation by third-party providers, SoCalGas will leverage its core competencies of customer engagement. SoCalGas will continue its focus in the following areas in order to implement effective strategies that utilize its understanding of the customer, effectively engage the customer, and facilitate customer participation in cost-effective and comprehensive energy efficiency:

- Customer Engagement: As a trusted energy advisor to customers, leveraging SoCalGas's connection to customers is paramount for success. SoCalGas's customer account executives play a foundational role in engaging customers in demand-side management solutions, including energy efficiency. This engagement will provide the valuable connection needed between SoCalGas, the customer, and the third-party implementers in order to motivate customers to pursue energy efficiency and provide the technical assistance needed to complete projects. SoCalGas also markets its On-Bill Financing (OBF) program primarily through its account executives. By enabling qualified customers to complete energy efficiency projects with no up-front costs, OBF eliminates one of the major barriers to participation in energy efficiency, resulting in greater customer engagement in energy efficiency programs.
- Data Analytics: As the energy service provider, SoCalGas has extensive database information on customers, including real time advanced meter data that provides accurate and actionable usage and behavioral metrics. SoCalGas's expertise in data mining and analytics will facilitate the identification of energy efficiency opportunities that will allow for intelligent outreach and effective engagement based on specific customer needs.

- Customer Outreach: Leveraging data analytics and targeted understanding of customer behavior will facilitate local outreach, including marketing efforts to drive customer awareness, interest, and participation in energy efficiency programs.

B. Portfolio Oversight

SoCalGas ultimately has the fiduciary responsibility in administering the energy efficiency portfolio, including assuring that ratepayer funds are utilized properly. This responsibility requires a portfolio and program oversight role, including performing inspections, engineering review, quality assurance, and quality control (QA/QC), and effective contract management. In addition, SoCalGas will leverage its established infrastructure, which includes rebate processing, and the utilization of IT systems to track program participation and enable reporting to the Commission.

As the program administrator, SoCalGas will track progress and achievements toward the following overarching portfolio goals and metrics:

- Total System Benefits (TSB)
- Energy Savings
- Water Savings
- Cost-effectiveness: TRC and PAC[49]
- CPUC Business Plan Metrics as established in D.18-05-041
- Market Support and Equity metrics as established by CAEECC Working Group[50]

Monitoring progress to these overarching portfolio goals and metrics, will be vital to ensure SoCalGas's portfolio meets all intended outcomes to help California achieve its decarbonization goals. Constant tracking and portfolio oversight will allow SoCalGas to analyze which programs and/or measures are not achieving planned targets and to quickly change strategies and tactics. SoCalGas will continually be optimizing its portfolio to ensure TSB goals and cost-effectiveness requirements are met. These portfolio oversight activities are critical as energy savings and avoided cost values are updated, impact and process evaluations are released, new policies are adopted by the CPUC, new technologies get introduced into the

[49] D.21-05-31 now requires that the resource acquisition programs combined meet a 1.0 TRC on an ex-ante basis.

[50] SoCalGas will be tracking to the Market Support and Equity metrics in Program Year 2022 and 2023 and will establish targets for the 2024-2027 program cycle in the true-up advice letter due on September 1, 2023.

portfolio and even when unpredictable events occur that may require a shift in outreach and implementation procedures.

It is critical that program administrators retain the flexibility to quickly pivot strategies and tactics when needed. This includes the ability to carry-forward and carry-back budgets across the program cycle, being able to quickly amend or extend third-party contracts and being able to swiftly procure or re-solicit for third-party programs. The success of SoCalGas's portfolio depends on its ability to procured on-board, and ramp-up third-party implementers and their programs.

C. Third-Party Programs

SoCalGas's role overseeing third-party implementers and their programs be focused on collaboration, QA/QC, and contract management. Collaboration entails continual engagement with third-party implementers on program progress, outreach efforts, customer participation, and challenges. SoCalGas will provide its insight on these activities as well as analyze program performance metrics and provide suggestions to pivot strategies or approaches if warranted. Additionally, SoCalGas will perform inspections and QA/QC activities to ensure energy efficiency measures are installed correctly. Level of inspections and QA/QC will depend on the intervention strategies and measures installed, the number of years program has been offered, and historical levels of QA/QC for similar types of programs. Finally, proper contract management will be conducted and monitored to ensure third-party implementers are abiding by terms executed during contract negotiations. These include adherence to CPUC policies, CPUC terms and conditions[51], and additional SoCalGas terms and conditions. Contracts also have key performance indicators (KPI) that tie into SoCalGas's portfolio TSB goals, sector level energy savings, cost-effectiveness, and metrics by program segment. Third-party implementers meeting program metrics and KPIs will be critical for SoCalGas to meet portfolio vision and goals.

1. Solicitation Strategy

In this section, SoCalGas provides its solicitation plan to provide energy efficiency programs and services over the 2024-2027 program cycle in compliance with the Commission's requirement of 60 percent third-party program implementation. This plan includes operational details, proposals, and schedule of energy efficiency solicitations. SoCalGas will continue its segment-based solicitations to diversify its portfolio and to seek implementers that provide

[51] The CPUC Standard Terms and Conditions and Required, Modifiable Contract Terms and Conditions were approved in D.18-10-008.

customer-centric solutions, cost-effective delivery, and promote natural gas efficiency and decarbonization.

a. Solicitation Approach and Schedule

In the previous Business Plan program cycle (2015-2025), SoCalGas solicited its first set of sector-based contracts and on an annual basis released a series of competitive solicitations to meet the Commission's 60 percent third-party program implementation objectives. This approach allowed the third-party implementer community the ability to design, propose and implement innovative programs for SoCalGas.

D.18-01-004 approved a two-stage solicitation approach for energy efficiency third-party programs and required the California investor-owned utilities (IOUs) to utilize PRGs and IEs for oversight. Stage 1 is the Request for Abstract (RFA) process, which is intended to gather high-level information on prospective programs and contractors. Stage 2 is the Request for Proposal (RFP) process to third parties who are qualified after Stage 1. Negotiation, contracting, and filing of Advice Letter complete the solicitation process.

b. Stakeholder Engagement

The CPUC and CAEECC members, including PAs and third-party implementers, have developed a process to gather and apply stakeholder input into the solicitation process. A core element of the stakeholder engagement process for solicitations is the use of Independent Evaluators (IEs) and Procurement Review Groups (PRGs) which perform a key oversight and monitoring role in all of SoCalGas's program solicitations. Both SoCalGas and the IEs are working actively together, and this arrangement will continue to provide a standard solicitation experience across our existing and future business partners, reduce any potential duplication of processes, and allow for streamlined program delivery. Moving forward, SoCalGas will continue to employ IEs in its program solicitations along with the Procurement Review Group (PRG) Community.

The Energy Division and the IOUs collaborated to develop a reporting model for their stakeholders in the 2020-2021 Bi-Annual Stakeholder Forum. This model will aid in collecting feedback and includes the ability to make recommendations and ask questions to help improve the solicitation process.

With time, the focus of the solicitation process has evolved. For instance, in recognition of the changes in the energy markets and the environment, as well as the needs of its customers and the larger supplier community, SoCalGas's goals and objectives are listed below.

EX02 TABLE 62: Solicitation - Goals & Objectives	
Solicitation Goals	**Objectives**
Execute timely solicitation process	Achieve time savings in the energy efficiency program's two-stage solicitation process through optimization improvements.
Stimulate innovative program designs	Increase collaboration through internal and external stakeholders.
Increase diversity in bidders	Increase program solicitation participation of new, small, and diverse business owners across segments.
Provide more cost-effective delivery of program savings	Reduce costs by tailoring solicitation strategy across segments.

To achieve these objectives, SoCalGas proposes the following changes to the program solicitation process:

- Enhancements to the current two-stage solicitation approach
- The introduction of new tools, standards, and procedures.
- The expansion of efforts in attracting small, new, diverse business partners
- Post-60-percent-third-party contracting and risk assessment.

Some of the proposed new solicitation elements for the 2024-2027 program cycle will require specific changes to Commission-adopted rules which are described in more detail below. The proposed changes respond to Commission guidance in the form of adopted study, PRG working group and IE recommendations, and SoCalGas's ongoing efforts to improve and optimize energy efficiency solicitations.

c. New Solicitation Elements Under Consideration

SoCalGas will focus efforts on recommendations from a CPUC-ordered study[52], PRG working groups, and IEs to improve the solicitation process for energy efficiency programs. The study recommendations in the Negotiation phase were largely aimed at approach in contract negotiations, pay-for-performance (P4P) model, and potential alternatives for supporting smaller firms.

- Length and duration of the two-stage solicitation - SoCalGas in collaboration with its external stakeholders launched a process improvement initiative. The collaborative effort was established to continuously improve the energy efficiency

[52] CPUC EP Evaluation Report (January 27, 2022), *available at* https://pda.energydataweb.com/api/view/2581/Opinion%20Dynamics%203P%20Evaluation%20Report_FINAL_2022-01-27.pdf.

program solicitation process. The stakeholders explored opportunities to best align and solicit third-party vendors seamlessly while reducing program administration costs. Through this collaborative process, several improvement opportunities were identified that will be further explored for this program cycle. For example, the length and duration of the two-stage solicitation process make it challenging to offer a standard approach that fits the needs of the contracting community. SoCalGas is working on increasing third-party program implementer awareness of energy efficiency solicitations across all contractor sizes.

- Scorecard complexity – SoCalGas will enhance the current scorecard that will provide seamless delivery of solicitation to its vendors to respond to bidder questions about scoring methodology. SoCalGas will identify a methodology and optimal considerations in its scorecard design to support the bidder's experience with fewer touchpoints and improved service delivery. SoCalGas will also conduct third-party program focus groups to understand barriers related to the solicitation process.
- Lack of new and innovative program ideas – SoCalGas's Innovative Designs for Energy Efficiency Activities (IDEEA365) program, an ongoing offering to capture innovative new program proposals to enable customer engagement in energy efficiency will be in place.
- Low participation of new, small, and diverse third-party program implementors. - During this program cycle, SoCalGas will actively align our DBE utility practices promoting increased opportunities for new and diverse business partners.
- Standardized Contracting Training - SoCalGas wants to provide standardized contractor training where it makes sense. This education will enhance vendor experience and reduce any unnecessary duplication. This enhancement will provide more opportunities for one contractor to learn the common SoCalGas contract requirements of the energy efficiency program, to the extent possible, learn about definitions and upcoming changes to its terms and conditions.

Strategies

- Improve Program Solicitation Delivery

Simplification of the two-stage process by relaxing or modifying some of the categories in the RFA/RFP, scoring, negotiation phase to allow for new entries of new, small, diverse

business partners. In addition, the proposed model supports the post 60 percent third-party program implementation in the timely contract re-solicitations and/or renewals.

Through SoCalGas Lean Six Sigma (LSS) team, identifying opportunities to optimize process steps and reduce lead time for SoCalGas energy efficiency Program Solicitation.

The Two-Stage and One-Stage Solicitation Approach

SoCalGas has thus far implemented the two-stage solicitation process, which has been generally successful in achieving the 60 percent third-party program implementation Commission goal. Additionally, SoCalGas has incorporated process improvements into its current solicitation requirements and materials, such as:

- Reduced the number of documents and questions in the RFA submittal stage
  - A template from 20 questions down to 12 questions
  - A broad overview of the proposed program and budget (a total of 3 documents,15 pages)
- Established documentation/standardization
  - Create consistent and standard execution procedures
  - Training on process and procedures to further ensure consistency in contract execution
- Achieved time savings
  - Reduce the number of documents/questions
  - Reduce the complexity of questions and documents
  - Ability to plan and accurately forecast future contract execution utilizing the same methodology

Recently, SoCalGas began requiring smaller solicitation and where feasible to propose one-stage solicitation for substantial schedule and cost-efficiencies.

One-Stage Approach

There is currently a recommendation from Opinion Dynamics to utilize a one-stage (RFP) solicitation for smaller program budgets to allow IOUs flexibility to shift to a one-stage process when appropriate.[53] A one-stage solicitation process would align with recent and future energy efficiency program solicitations needs in attracting a newer and smaller diverse supplier base. Based on stakeholder feedback, large, and aggregated solicitations may limit competition

[53] *Id.*

and hinder vendor diversity goals. This also allows for more integration across broader company contracting capabilities.

Continuing with the same two-stage approach for smaller solicitations would miss SoCalGas's objective of 1) timely 2) innovative, 3) diverse and 4) cost-efficient solicitations. Additional resource requirements to maintain current and future solicitations and to develop a historic convenience report.

The one-stage approach reduces redundancy, is time and cost-efficient (approximately 12 months vs. 22 months), and has the potential to attract new, small, diverse business partners. Moving forward, SoCalGas intends to utilize the one-stage solicitation process, as a new proposed process.

The PRG along with the IE's will continue to support and provide oversight to the whole solicitation process.

Enhancements to the Two-Stage Approach

1. The Opinion Dynamics study also noted that there was little distinction between the RFA and RFP stages at the beginning of the solicitation process. Simplified steps and criteria are attractive to future business partners, SoCalGas proposes the following modifications to the two-stage approach:
2. For the RFA, limit the criteria to program design and strategy and experience and skills only.
3. For the RFP, criteria include cost and energy savings, experience and skills, program design and strategy, social responsibility, and compliance.
4. The two-stage approach will be used in new solicitations with contracts greater than $5M a year.
5. The PRG along with the IEs will continue to support and provide oversight to the entire solicitation process.

2. Strategic Alignment with Supply Management Enterprise to Support SoCalGas's overall DBE Targets

SoCalGas see opportunities for diverse firms to work with energy efficiency programs in new and innovative forms in delivering energy efficiency natural gas benefits to its customers. Supplier diversity is supported by SoCalGas's executive team across the service territory. There are notable barriers to the adopted solicitation process, including small contractors' capacity being constrained by the two-stage process, and the reluctance of contractors to invest in support

of the drawn-out solicitation process. At this point, it has become clear that changes in the market may be a more important factor.

SoCalGas will assist diverse subcontractors by providing project opportunities, technical assistance, mentoring, and coaching through our supplier diversity program. This strategy provides the greatest prospect to effectively address meeting SoCalGas DBE goal of 43%.

SoCalGas holds quarterly strategy meetings with its largest prime suppliers and monitors their subcontracting goals. SoCalGas's supply management team identifies subcontracting opportunities and shares listings of diverse firms for prime suppliers' consideration for subcontracting activities and attending pre-bid meetings. SoCalGas actively introduces prime suppliers to diverse firms. During the RFP process, Prime contractors complete a Subcontracting Goal Form and include diverse subcontractors for each bid.

Working with SoCalGas's Supply Management department, energy efficiency programs will offer several supplier developments and technical assistance programs aimed to prepare and educate the small, diverse firms to be "contract ready" to for future solicitation opportunities:

- **Business Assessment** is a webinar-based program that assesses the condition of businesses, identifies areas for improvement, creates a plan to enhance performance, and provides follow-up at specified intervals to monitor progress.
- **Elevate Entrepreneur Institute**, a three-part class that features topics such as strategic thinking and tactics to align goals to stay adaptable.
- **Organizational and Operations Strategy Program**, **designed** to teach integrated performance development models, setting business objectives and expectations, and supporting systems processes. The program seeks to enrich and expand the capabilities of smaller diverse business owners, help them assess their workforce and develop proper alignment of resources.
- **Smaller Contractor Opportunity Realization Effort Our Smaller Contractor Opportunity Realization Effort (SCORE) program** identifies procurement opportunities at SoCalGas and matches them with qualified smaller diverse suppliers with revenues under $5 million and fewer than 25 employees. These opportunities often lead to participation in a competitive bid with like-sized companies. Upon winning a contract, SCORE contractors receive on-the-job training, feedback from project managers, and invitations to business boot camps designed to help them grow and build capacity.

- SoCalGas will **continue** to use **customer segmentation** to market and outreach to specific communities to promote Diverse Business Enterprise ("DBE") registration, participation, and reporting through its Supply Management contractor network. SoCalGas understands that he promotion of DBEs presents opportunities to enhance the program delivery to the communities in its service territory.
- **Contractor Training** is a part of **SoCalGas's** efforts to onboard new contractors expeditiously, the Program Representative training and the contractor are all conducted online. This enabled the training sessions to address issues and concerns customized and applicable to new contractors.
- **Internal stakeholder collaboration**, **evaluating** the effectiveness of technical assistance programs, gauging the impact of supplier diversity programs on communities serve, promoting and increasing participation in strategic planning efforts.
- SoCalGas will continue to **work** with **community based organizations**, peer utilities, and others to keep supplier diversity at the forefront. Strategically targeting and developing diverse suppliers in areas of energy efficiency and introducing them to our supply chain. Our DBE program managers,
    - participates in planning and pre-bid meetings to promote diverse supplier participation
    - attends industry-related conferences to meet potential suppliers in underutilized areas and
    - contacts diverse suppliers who are not certified and encourages them to seek certification.
- The subcontracting approach includes meeting with top energy efficiency suppliers to increase their subcontracting performance and targeted showcases that introduce prime firms to diverse suppliers for future business opportunities. Continue to work with our DBE partners in utilizing an internal reporting tool to identify subcontracting opportunities and challenges. Monitor subcontracting efforts and performance. Collaborate with Procurement to create a contractor's checklist and manage diverse vendor subcontracting plans.

3. Post 60 Percent Third-party Program Implementation

SoCalGas will maintain third-party program momentum through the 2024-2027 program cycle. As the 60 percent third-party program closing date approaches, SoCalGas will start making preparations for:

- Renew or recompete when contract terms are up and under what criteria and rules
- measuring success and cost-effectiveness, and
- retain diversity and growth of market players in the EE program.

SoCalGas has prepared and implemented procedures to optimize its third-party program portfolio and ensure compliance with CPUC requirements. These procedures include the following activities and processes:

- Key Performance Index (KPI) monthly reports to control and monitor the program implementation details, scope, budget, and schedule.
- validation of the flow of information in an accurate and timely manner.
- Variance explanations of established budgets, scope, schedule, and both parties are then asked to review the report.
- corrective action plans where appropriate.

The program support team helps to ensure business partners adhere to SoCalGas energy efficiency program best practices. From technical to administrative support, SoCalGas has extensive experience helping its business partners succeed. The additional guidance from our business partners enhances the program's internal control procedures and ensures accountability and transparency.

SoCalGas is developing program planning and support analytics capabilities and systems to enhance our business partner's experience. This will be a valuable tool that will help to evaluate the efficacy of the current KPIs, scoring schemes, and refine current and/or introduce new scoring schemes and weights. SoCalGas will analyze historical information across vendor types and scoring metrics to develop to enhance the current scoring tool. This capability is anticipated to enhance the future SoCalGas energy efficiency program solicitation, planning, implementation, and marketing efforts.

4. Contracting Strategy and Risk Management

a. Contracting Assessment

Identifying, sourcing, negotiating for, procuring services, and maintaining relationships with third-party program implementors are essential to ongoing operations. Implementing

technology and procedures that facilitate a smooth procurement process is part of SoCalGas portfolio administrative priorities.

As SoCalGas delivered its 60 percent third-party program implementations, maintaining a business partners relationship is a priority. SoCalGas has concluded that going forward, program effectiveness will depend upon policies and standards governing third-party contract renewal and recompete:

Scenario 1: Renew contract when terms are up. In Scenario 1, SoCalGas will perform market rate analysis to determine new players, pricing, and product offerings. The program team will ensure compliance to established KPIs, implementation plan, and also a report to review any contractual changes that will be impactful. This is a candidate for renewal when contract terms are up against when all criteria are met:

- In line with SCG market rate analysis
- Third-party program implementor delivered EE savings
- Third-party program implementor met Commission objectives

Scenario 2: Recompete when contract terms are up. In Scenario 2, SoCalGas will perform market rate analysis to determine new players, pricing, and product offerings. The program team will ensure compliance to established KPIs, implementation plan, and also a report to review any contractual changes that will be impactful. This is a candidate for recompete when contract terms are up:

- Third-party program implementor unable to deliver EE savings
- Third-party program implementor did not meet Commission objectives
- Third-party program implementor decides not to contend

Scenario 3: Status quo. In Scenario 3, SoCalGas will perform market rate analysis to determine new players, pricing, and product offerings. The program team will ensure compliance to established KPIs, implementation plan, and also a report to review any contractual changes that will be impactful.

- Designed for third-party implementor that passed Scenario 1 criteria
- Most effective for existing business partners implementing two or more programs. For example, Vendor 1 implementor with Program ABC and also DEF.

- In this scenario the third-party program implementor is identified as a productive vendor, meeting all established program governance. SoCalGas can opt to offer a multi-service agreement (MSA).
- This scenario will significantly streamline the negotiation phase.

5. Portfolio Risk Management Oversight

SoCalGas prizes productive contractors that led SoCalGas to focus in this application on enhancing its third-party program implementor capacity by adopting the recommendations from the PRG community, recent Opinion Dynamic study, IE's, and exploring new tactics in managing business partners and program delivery.

SoCalGas will continue to engage and educate its third-party business partners of contract requirements including insurance requirements, subcontracting goals, and payment terms including the option for eliminating discounts in exchange for better rates and longer-term payments.

Under the same guidance from SoCalGas's external stakeholders, the oversight of the governance to monitor the effectiveness of third-party program delivery is necessary to document and report the risk intrinsic in energy efficiency program portfolios.

In developing the decision-making process for internal and external records, SoCalGas's planning stage includes conducting risk (safety, regulatory, financial implications, environmental) and mitigation scoring analysis. In this exercise, SoCalGas will clearly explain its rationale for selecting mitigations for each risk of its overall portfolio. The selection and scoping of risk mitigations can be prompted by factors such as third-party performance, planning, funding, technology, compliance requirements, operational and implementation measures. The aim is to capture as many data points to provide a level of granularity as reasonably possible to develop mitigation plans.

For measures in which risk controls do not meet expectations or requirements, SoCalGas will conduct due diligence and develop mitigation strategies. Action plans will be discussed in the monthly PRG meetings to assess whether a program should be shifted, for example, from a high-cost program to a more cost-effective program, depending on the Commission's priority in a given market condition.

SoCalGas will continue working with the Commission, the other IOUs, the PRG community, and the IE's in reviewing policy goals that support statewide solicitation process recommendations. These reviews give SoCalGas an opportunity for improved inter and extra-departmental coordination.

6. Solicitation Schedule

SoCalGas provides a preliminary solicitation schedule for third-party programs to be implemented during the Portfolio Plan program cycle. Each solicitation listed is also contingent on SoCalGas's decision to renew or rebid contracts that are currently in place. Additionally, several solicitations listed are currently in the solicitation process and anticipated release date of the next solicitation (should SoCalGas decide to rebid) may change based on executed contracts. SoCalGas will be regularly updating a more detailed schedule on the CAEECC website.[54]

EX02 TABLE 64 - Anticipated Solicitation Schedule		
	Solicitations Anticipated to Be Released if Determined to be Re-bid	
Year	**Local/SW - Sector**	**Solicitation**
2023	Local - Residential	Residential Single Family
	Local - Residential	Residential Multifamily
	Local - Residential	Manufactured Housing
	Local - Commercial	Small & Medium Commercial
	Local - Cross Cutting	IDEEA365
2024	Local - Agricultural	Agricultural Sector
	Local - Cross Cutting	Behavioral
	Statewide - Commercial	Point of Sale Food Service
	Statewide - Commercial	Midstream Water Heating
	Statewide - Cross Cutting	Gas Emerging Technologies
	Local - Cross Cutting	IDEEA365
2025	Local - Commercial	Large Commercial
	Local - Public	Public Sector
	Local - Residential	Multifamily Whole Building
	Local - Cross Cutting	Outreach
	Local - Cross Cutting	Marketplace
	Local - Cross Cutting	Other Market Support Solicitations
	Local - Cross Cutting	IDEEA365
2026	Local - Cross Cutting	IDEEA365
2027	Local - Industrial	Industrial Segment Solutions
	Local - Cross Cutting	IDEEA365

D. Statewide Programs

The Commission, in D.16-08-019, created significant changes to statewide program administration and third-party program offerings in energy efficiency portfolios. This decision directed program administrators to transition the majority of program implementation to be outsourced, with a minimum of 60 percent of the budgeted portfolio. In addition to changes to the third-party requirements, the Commission modified the energy efficiency program

54 CAEECC solicitation website: https://www.caeecc.org/solicitations

administrative structure by requiring that all upstream and midstream programs be delivered uniformly throughout the four large Investor-Owned Utilities' (IOUs) service territories,[55] and overseen by a single Lead Program Administrator (Lead PA).

SoCalGas is the Lead Program Administrator for the Gas Emerging Technologies Program, the Foodservice Point-of-Sale (POS) Rebate Program, and the Midstream Commercial Water Heating Program.

1. Statewide Programs Administered by SoCalGas

a. Gas Emerging Technologies Program

The Gas Emerging Technologies (GET) Program will address three overarching priorities:

- Use Technology Priority Maps (TPM) to ensure high priority areas are met. To address the need to ensure all high priority areas are addressed, GET will use collaboratively designed TPMs to drive the emerging technologies research agenda during the time period covered in this business plan. GET will use existing technology roadmapping efforts whenever possible to create TPMs to align with California policy and customer needs. These TPMs will seek to identify good candidates for all utility programs including market transformation initiatives.
- Support a pipeline with a consistent stream of new and diverse technologies. GET projects will be designed to encourage manufacturers and technology developers to create breakthrough technologies that help Program Administrators achieve their energy efficiency goals.
- Find emerging gas technologies with energy savings opportunities for customers in all sectors. This is accomplished in part by early vetting of technologies and solutions that are candidates for inclusion into an energy efficiency portfolio and to work identify how to overcome commercialization barriers.

b. Foodservice POS Rebate Program

The Foodservice POS Rebate program seeks to increase the sales of high efficiency commercial foodservice equipment by engaging midstream market actors to stock and actively

[55] The four IOUs are Pacific Gas and Electric (PG&E), Southern California Edison (SCE), San Diego Gas and Electric (SDG&E), and Southern California Gas Company (SoCalGas).

market high efficiency equipment. This supports the CLTEESP, which has an overarching objective to utilize the market to achieve more profound energy savings, aligning with the program goal to incentivize the sale of high-efficiency foodservice equipment by engaging mid-stream market actors. The CLTEESP states that not only office buildings but stores, restaurants, warehouses, schools, hospitals, public buildings and facilities, and others account for over 25 percent of natural gas consumption and space heating, water heating, and cooking make up over 90 percent of gas use, and these areas should receive extra attention for energy efficiency strategies.[56] The program will deliver energy savings by providing end-use customers equipment rebates for high efficiency commercial kitchen equipment purchased at the point- of-sale.

c. Midstream Commercial Water Heating Program

The Midstream Commercial Water Heating program's objective is to push higher efficiency water heaters into the non-residential market by leveraging the distributor and contractor communities. The distributor and contractor communities allow SoCalGas to target all small, medium, and large non-residential customers. Customers will receive the utility rebate at the point of sale from the distributor/contractor thereby removing the need to complete additional paperwork. The goal of the program is to streamline the rebate process and target customers when they are looking at purchasing equipment.

2. Statewide Programs Administered by Other PAs

The full list of statewide programs and the Lead PA are listed below. SoCalGas provides funding to the Lead PA as shown in in Tables 3 and 4 of D.18-05-041. SoCalGas receives the proportional benefits from the Statewide Program through the CPUC's CEDARs reporting system. Please refer to the Lead PA's Application for the vision, design, development and intervention strategies for the respective Statewide Program.

EX02 TABLE 65 - Statewide Programs	
Statewide Program	**Lead PA**
Codes & Standards – Appliance Standards Advocacy	PG&E
Codes & Standards – Building Codes Advocacy	PG&E
Codes & Standards – National Codes Advocacy	PG&E
New Construction - Residential	PG&E
Emerging Technologies – Gas	SoCalGas
Emerging Technologies – Electric	SCE
Foodservice POS Rebate	SoCalGas

[56] California Public Utilities Commission, Energy Efficiency Strategic Plan, January 2011 Update, p. 28, *available at* http://www.cpuc.ca.gov/general.aspx?id=4125.

HVAC QI/QM Program	SDG&E
HVAC Upstream	SDG&E
Institutional Partnerships - Colleges	SCE
Institutional Partnerships – Government	PG&E
Midstream Commercial Water Heating	SoCalGas
New Construction - Nonresidential	PG&E
New Construction - Residential	PG&E
Plug Load & Appliances	SDG&E
Upstream Lighting	SCE
Workforce Education & Training – Career Connections	PG&E
Workforce Education & Training – Career & Workforce Readiness	SCE
Water and Wastewater Pumping	SCE

E. Portfolio Coordination

The key objectives of SoCalGas portfolio coordination include: open, active, and continuous collaboration among program implementers across SoCalGas's energy efficiency program portfolio is essential to achieving the portfolio goals and objectives. Such coordination must extend to other PAs to support the continued success of statewide programs and local programs offered to a shared customer base. SoCalGas will continue expanding on its groundbreaking joint program offerings with local POU in the energy and water industry and air quality management districts throughout SoCalGas's service territory. SoCalGas will aggressively promote other IDSM programs available to its customers while promoting cleaner energy choices.

- Creating and facilitating the SoCalGas program implementer coordination council to inform implementers on emerging policies, program achievements, new technologies, and best practices.
- Expanding joint agreements with local POUs, water agencies, and air quality management districts to advance energy and water efficiency and to contribute to emission reductions in support of advancing decarbonization policies.
- Collaborating with other PAs, including the CEC, to support the success of statewide and local program offerings across multiple services territories to increase EE adoption and reduce customer confusion.

1. Coordination with Statewide Programs

The transition to the statewide model represents the evolution of energy efficiency in California and the introduction of the next generation of energy efficiency portfolios. Key to the success of this transition is the understanding that all IOUs are equal partners regardless of who

is designated as the lead PA, and that the lead PA acts to the benefit of all IOUs. Therefore, the IOUs created the SWEET (Statewide Energy Efficiency Team) to coordinate with other program administrators, including designation around statewide programs and level of coordination for both statewide and reginal programs. The SWEET teams charter is to provide an effective conduit between the IOU Portfolio Management teams and project/program teams in developing the components and infrastructure to allow for the successful implementation of Statewide Programs. SWEET will coordinate and collaborate with individual project/program teams to ensure that viable, compliant solutions are developed in a timely manner that fulfill all the needs of Lead and Non-Lead IOU Program Administrators, including forecasting and reporting.

SoCalGas constantly communicates with other PAs regionally to identify areas of potential coordination for program activities. This will require clear targets, coordinated actions directed at key barriers, alignment of all stakeholder value propositions to progress SoCalGas's programs. SoCalGas will ensure its activities are differentiated and avoid duplication of effort, while maintaining cooperation with other PAs. These actions constitute a comprehensive approach to pursuing the targets and goals of this business plan.

2. Coordination with Regional Energy Networks:

SoCalGas continues to coordinate with RENs in the overlapping service territory to minimize program redundancy and find opportunities to collaborate. SoCalGas will coordinate with RENs to file Join Coordination Memorandum annually to describe programs coordination PAs with shared territory.

3. Coordination with Municipalities, Water Agencies, and Air Quality Management Districts

SoCalGas is an ardent proponent of working with other demand-side programs to jointly promote and deliver energy and water programs to minimize duplication, reduce cost and maximize customer participation. SoCalGas and its municipal utility/agency partners have jointly launched more than 40 different programs since 2012. SoCalGas's partnering efforts with other municipal utilities and agencies have grown steadily since 2012 with its initial Master Agreement with Los Angeles Department of Water and Power (LADWP) and have grown to include joint efforts with many more electric and water utilities that have overlapping territories with SoCalGas. The benefits of these partnering efforts have been very evident in increased program participation and reduced program expenditure. Partnering has become a key element in the design and delivery of SoCalGas's portfolio of demand-side programs, and SoCalGas's

proposed portfolio and budget reflect this continuously increasing partnering efforts with our program partners.

SoCalGas's service territory has many overlaps with those of other gas and water municipal utilities and agencies. Since 2012, SoCalGas has entered into a master partnership agreement with the largest municipal utility in its territories, LADWP, to jointly administer demand-side programs where appropriate. In the subsequent years, this master partnership has been expanded to include other major municipal utilities and agencies, including Anaheim Public Utilities, Pasadena Water and Power, Riverside Public Utilities and Metropolitan Water District. SoCalGas has also been partnering with more than ten water agencies its territories to coordinate program offerings, particularly those impacting low-income customers in disadvantaged communities. The partnering efforts serving the disadvantaged communities though energy efficiency and Energy Savings Assistance programs have always been a focus of SoCalGas to ensure that these customers receive the maximum program benefits possible, including products and services that save natural gas, electricity and water. Prior to any new program launch, SoCalGas coordinates its efforts with its partners to incorporate any potential partnering or co-funding of program activities. These joint activities may include a variety of strategies, including joint promotion and marketing, administration of rebates as well as direct install efforts. SoCalGas also consistently reviews and considers participation in its partners' portfolio of demand-side programs, including decarbonization and market transformation programs, as evidenced by a number of SoCalGas's subprograms currently being delivered by its partner municipal utility.

VI. EVALUATION, MEASUREMENT, AND VERIFICATION

SoCalGas plans to maintain the core objective to support evaluation, measurement, and verification of the performance and savings of its energy efficiency programs, while aiming to support the achievement of the CPUC's savings goals, portfolio segmentation, and other policy objectives through the following:

- Measurement and verification of savings: support accurate savings claims (*ex ante*), assist with portfolio adjustment in savings estimates (*ex post*) and cost-effective avoided cost benefits (Resource Acquisition segment)
- Evaluation of program effectiveness: analyze various program performance metrics to set baseline for design and improvement of programs and portfolio Total System Benefit (TSB) goals (Resource Acquisition segment)

- Assessment of the market: identify trends and characteristics to support the long-term success of the energy efficiency market and the needs of hard-to-reach, underserved, and disadvantaged communities (Market Support and Equity segments)
- Assistance to program planning and policy: provide necessary aid to programs and pilots, compliance filings and activities (all segments)

Recent evaluations[57] of energy efficiency programs have helped to shape SoCalGas's EM&V plan to adhere to the Commission's direction of the three program segments. SoCalGas's EM&V plan addresses issues identified in the evaluations to in support of each program segment and the portfolio. Evaluations of programs will also be incorporated with reporting metrics to reflect quantified values of program achievements and progress. These metrics include but are not limited to customers' energy savings and non-energy benefits, with a closer look at others such as societal (community) benefits to examine greater impact the programs deliver, especially Equity segment programs. Furthermore, SoCalGas will continue to collaborate with the PAs and Energy Division to carry out tasks that are required to launch studies, hire consultants, engage stakeholders, strategize projects, and manage related activities.

A. Summary of Planned EM&V Studies

SoCalGas is proposing four areas of focus to provide support for program segments and portfolio achievement. Individual studies will be presented accordingly in detail when the PAs are planning EM&V roadmaps in the future. Studies, ideas, and activities described here serve either or both SoCalGas and statewide interests. Also, as programs progress and budget allow, necessary changes will be applied and can influence certain evaluations.

1. Portfolio *Ex Ante* Savings

- *Leverage effective methodologies and analyses for impact evaluations to identify more ways to save energy*: The transition to TSB goals warrants an in-depth look at the effect of avoided cost values on energy efficiency savings. To maximize TSB, the avoided costs should be identified and leveraged where their highest value can be achieved. SoCalGas proposes a gas-only study to examine the avoided cost categories, which may include gas specific GHG adders and refined uncombusted methane leakage assumptions. Additionally, SoCalGas proposes to conduct studies that would pinpoint more ways to save energy and maximize

[57] CPUC Impact Evaluations for PYs 2018 and 2019, *available at* www.calmac.org

portfolio TSB, for measures applicable to certain market segments only, such as solar water heating.

- *Evaluate NMEC program specifics contributing to savings variance:* While Normalized Metered Energy Consumption (NMEC) programs continue to grow steadily in the past few years along with recent updates in the new NMEC rulebook, these programs are not being examined to compare with other energy efficiency programs that use more traditional savings estimation methods. SoCalGas proposes to evaluate NMEC program specifics contributing to savings variances (comparing to non-NMEC programs). This study will help SoCalGas and implementers better understand what types of programs and interventions are best suited for estimating natural gas savings using NMEC methods.
- *Study savings persistence in behavioral programs for future planning:* SoCalGas also proposes a study of savings persistence in behavioral programs to evaluate the 1 year useful life, as well as explore the reasons attributed to decision making in program participation.

2. Portfolio Optimization and Evolution

- *Emphasis on market studies to identify barriers and distinctive characteristics:* The COVID-19 pandemic has impacted the economy, customers willingness and ability to invest in energy efficiency, and how energy efficiency programs are implemented, among other impacts. This pandemic is ongoing and may have a long-term effects on the EE market that are not yet known. SoCalGas would like to lead a study on the effect of the COVID-19 pandemic that has a significant impact on energy savings and is more likely to influence the avoided cost values, to apply lessons learned for current portfolios and to be prepared for future significant unknown events. Additionally, SoCalGas proposed and led the Multifamily Boiler Market study for natural gas, which was completed in 2019. The results of this study provided intelligence on many aspects of the boiler market which were either not known or incorrectly assumed before. This success encourages SoCalGas to conduct more studies that identify barriers and distinctive market characteristics, such as fuel switching decision making, energy efficiency measure selection process, and any other objectives. The research will be based on customer surveys to provide insight to these areas to aid in portfolio optimization.

- *Make a significant shift in environmental and social-driven research to identify gaps and areas of potential savings:* Although hard-to-reach, underserved, and disadvantaged communities were often reached by Low-Income (LI) Programs, SoCalGas will make a big shift in environmental and social driven research to identify potential within the Equity segment for meeting the needs of these customers through the energy efficiency portfolio. This shift will serve a purpose to fill the gaps between LI and energy efficiency programs by assessing the customers' wants and needs, barriers in socio-economic status, geographical location, ownership, and other considerations, with recommendations on how programs may be revised to better serve these customers.
- *Study the new Market Support and Equity portfolio segments to explore trends and qualities:* A process evaluation of a program in each segment will provide meaningful insight into the success of portfolio segmentation and program delivery. SoCalGas believes that a deep dive into the market to explore trends and identify program performance qualities will bring great support to education, training, and relationship building of all parties involved. One potential area for evaluation is of non-energy benefits (NEBs) for customers in the Equity segment who are not enrolled in LI programs. Identifying and potentially quantifying NEBs in the energy efficiency portfolio would not be an attempt to add NEBs to the cost-effectiveness calculation of energy efficiency programs, but rather to examine the true benefits to encourage program participation in the mentioned communities. The need to better study NEBs has been discussed and suggested by the CAEECC Equity Working Group.[58]
- *Examine the energy savings and carbon emission reduction potential of cleaner energy technologies:* As SoCalGas remains the largest natural gas utility in the nation, it calls for continuing opportunities to examine the potential of cleaner energy technologies, including natural gas fuel cells.[59] SoCalGas has proposed a fuel cells study in the past and will continue to explore this topic based on the results of the first study and what the current technology has to offer. SoCalGas's current study focuses on technology application in the residential market. The

[58] CAEECC Equity Metrics Final Report, October 20, 2021, pp. 19-20, *available at* https://www.caeecc.org/equity-metrics-working-group-meeting.
[59] Fuel Cells Study posted on PSR: Project Status Report, *available at* psr.energydataweb.com.

goal is to describe and quantify the energy efficiency benefits from using recovered waste heat to meet domestic hot water and space heating requirements in residential applications.

3. Support Program Impacts (*Ex Post*)

- *Investigate variance factors in third-party program savings estimations:* As identified in recent impact evaluations, early replacement of certain measures was only partly program motivated, while free ridership continued to affect net savings values. The status quo method of focusing on the same higher-impact measures year after year leaves a significant portion of the portfolio effectively unevaluated, and proves to be challenging to leverage ex post results to improve third-party savings estimations. SoCalGas recommends that this historical evaluation focus be changed so that the CPUC, PAs, and third parties have a greater understand of the measures making up the portfolio as a whole. As such, SoCalGas proposes evaluations include measures with mid-level savings to examine factors that influence participation, net savings, and lifecycle savings.
- *Consult with the Commission on ways to perform a real-time assessment of project influence to support timely net-to-gross assumptions:* A program's influence on the customer decision to pursue an EE project should be immediately evaluated by the CPUC consultants following the project completion. A program's influence or attribution is evaluated 2-3 years after installing the customer project. Thus, there is a significant time gap between when the EE project is completed by the customer and evaluated by the CPUC's consultants. This time gap can result in challenges in effectively measuring a program's influence on the EE project thereby affecting net energy savings and portfolio goals. The CPUC should instruct its Energy Division to collaborate with PAs and program implementers to improve the evaluation timing as programs and projects are delivered to better estimate program attribution in real-time.
- *Perform studies for Estimated Useful Life (EUL) for various equipment to assist the future ex post evaluations:* The impact evaluations' results also identify challenges such as high cost and measure's effective useful life which alter both program participation and energy saving opportunities. SoCalGas proposes to study the factors needed to assess and update EUL, and come up with a plan to collect the required data to provide to the CPUC for future evaluations and

updating energy efficiency claims to more accurately represent lifetime system benefit.

4. General Portfolio and Program EM&V Support

- *Expand process evaluations with a highlight on third-party programs to include evaluability assessments to measure program effectiveness*: SoCalGas proposes to expand process evaluations with a highlight on third-party programs to include evaluability assessments to measure program effectiveness. Third-party programs have not been evaluated on the whole, and as designed, they may lack necessary data to assist the CPUC in impact evaluations. SoCalGas proposes to study its third-party programs by program type to assess whether the programs are capturing enough information to inform impact evaluations, as well as assess how well these programs are serving customers.

B. Summary of planned EM&V Activities

1. Portfolio Policy Compliance

- SoCalGas EM&V will continue to take part in all energy efficiency filings and make efforts to discuss and integrate with the IOUs in all statewide EM&V plans for specific IOU-led programs and pilots.
- With third-party programs in progress, SoCalGas EM&V will also provide all needed assistance beyond studies and evaluations, such as AMI data transfers, support on randomized controlled trial design and implementation, and any other program needs.
- SoCalGas EM&V will also continue to participate in projects led by the Commission to upgrade and update CEDARS (California Energy Data and Reporting System), eTRM, Policy Manual, NMEC guidelines/rulebook, and any other protocol and tools.

2. PA/ED Budget Allocation and Justification

The Commission's current budget allocation for EM&V of 4% of the portfolio budget provides sufficient resources to perform EM&V for the portfolio plan period. However, SoCalGas proposes that the split between PA and Energy Division shares is adjusted from 27.5% to 30% for this Business Plan period. SoCalGas recognizes activities unrelated to research and

studies, such as eTRM, which the PA EM&V budget will fund.[60] In addition to these activities, and in accordance with Commission Decision 16-08-019, PAs are authorized to request up to a maximum of 40% of the budget for EM&V, for specific purposes.[61] In line with this, SoCalGas requests its portion of these funds to be 30% of the total EM&V budget. This increase will allow for further focus on evaluating normalized metered energy savings programs and market assessments for market transformation opportunities.

VII. COST AND COST RECOVERY

A. Cost Recovery Through Continued Use of Balancing Account

SoCalGas will continue to use balancing accounts for the cost recovery of its energy efficiency portfolio. SoCalGas's energy efficiency portfolio costs are recovered through SoCalGas's Demand Side Management Balancing Account (DSMBA).[62] The DSMBA is an interest-bearing balancing account recorded on SoCalGas's financial statements. The primary purpose of the DSMBA is to record the difference between actual Public Purpose Program (PPP) revenue requirements incurred and the corresponding forecasted PPP revenue requirements incorporated in rates for SoCalGas's energy efficiency and other DSMBA programs. For statewide programs, SoCalGas utilizes the Statewide Energy Efficiency Balancing Account (SWEEBA)[63] for tracking and recording program costs. Funds in SWEEBA are sourced from other IOUs' contributions and SoCalGas's DSMBA.

B. Commitments

At the end of each budget cycle, the Commission allows a reasonable portion[64] of the budget to be carried over into the next budget cycle for funds that have been committed to customer or contractors but not yet spent. For this portfolio plan cycle, the Commission has transitioned away from an annual budget cycle (*i.e.* ABALs) to a cycle in which four-year budgets will be approved up front.[65] The Commission also clarified that annual budget forecasts will be fungible within the four-year application period and that PAs will still need to account for any unspent/uncommitted funds at the end of each four-year period. This change will allow PAs

[60] Resolution E-5082, p. 11.
[61] D.16-08-019, p. 112, OP 16.
[62] SoCalGas Preliminary Statement, Part V, Balancing Accounts, Demand Side Management Balancing Account, *available at* https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/DSMBA.pdf.
[63] AL 5348, *available at* https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/5348.pdf.
[64] D. 12-11-015, p 95 ("allows for certain authorization to be requested via advice letter if more than 20% of the budget for the current program cycle must remain encumbered for activities that will take place in the following program cycle.")
[65] D. 21-05-031, pp. 30-31

to spend their approved budgets at any time during the four-year application period, eliminating the need for annual accounting of committed funds.

SoCalGas's current budget commitment process is developed in accordance with D.12-11-015 and remains applicable for the four-year portfolio budget cycle. At the end of each budget cycle, SoCalGas determines outstanding commitments on a per program basis. SoCalGas generally defines a commitment as a program reservation made by a customer, a financial obligation made to a customer, or a contractor through an executed contract. A commitment is released when a customer drops out from participation in an energy efficiency program or a contractual obligation is released.

Approved funds that have neither been spent nor committed at the end of the budget cycle are generally returned to ratepayers, either by offsetting future revenue requirements or as directed by the Commission. In some budget cycles, SoCalGas may be required to utilize unspent, uncommitted funds to other state initiatives and policies, such as the AB 841 program.[66] In accordance with D.21-12-011, SoCalGas will submit an advice letter seeking authority to implement a program focused on summer reliability for 2022 and 2023 using unspent, uncommitted funds from prior cycles. Any funds not used for that effort will be returned to ratepayers at the next opportunity.

[66] D.21-01-004, p. 5

VIII. WITNESS QUALIFICATIONS

DARREN M. HANWAY

My name is Darren M. Hanway. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011. I am employed by SoCalGas as the Manager of Energy Programs & Strategy in the Customer Programs and Assistance Department.

I joined SoCalGas in October of 2012 to lead the energy efficiency policy support team. In December 2015, I assumed my current position. My current responsibilities include the management of the company's energy efficiency programs, including residential, commercial, industrial, agricultural, workforce education and training, and emerging technologies programs, in addition to the engineering services team. I also oversee the company's solar thermal programs.

Prior to joining SoCalGas, I held positions of increasing responsibility at Southern California Edison working on their demand-side program offerings. I received a Bachelor of Science degree in Business Administration and a Bachelor of Arts degree in International Relations from the University of Southern California in 2003. I have previously testified before the California Public Utilities Commission.

I am sponsoring Exhibit 2, save for the Forecast Methodology section.

This concludes my testimony.

CLINTON CHEIN

My name is Clinton Chien. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011. I am employed by SoCalGas as the Manager of Budgets Strategy & Oversight in the Customer Programs & Assistance Department.

I joined SoCalGas in May of 2021 to lead the budget and planning team supporting SoCalGas's refundable programs. I have over 20 years of corporate finance and planning experience, including over 10 years at Southern California Edison. I received a Bachelor of Science degree in Civil Engineering and a Master of Business Administration (MBA), both from the University of California, Los Angeles (UCLA). I have not previously testified before the California Public Utilities Commission.

I am sponsoring the Portfolio Budgets (Exhibit 1) and the Forecast Methodology (Exhibit 2) section.

This concludes my testimony.