For more information, please visit:

socalgas.com/h2IE



11-202







### A Key Solution:

# Clean Hydrogen Microgrid Cle

Clean hydrogen\* microgrids can enhance community energy resilience by leveraging distributed renewable energy production, storage, and use.



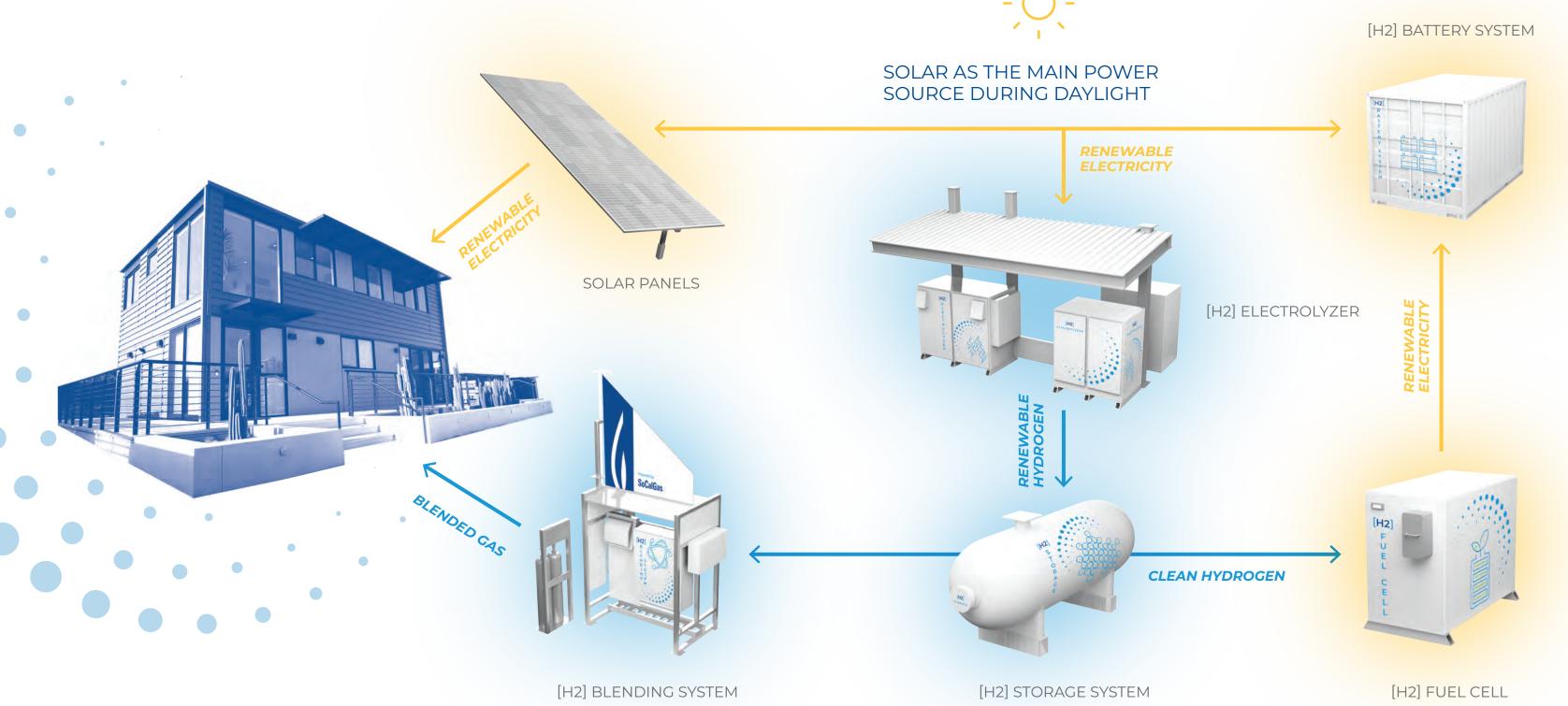
Local energy generation reduces strain & supports the electric grid.



Supplies critical and emergency energy with zero greenhouse gas emissions during power outages.

[H2]

## THE [H2] INNOVATION EXPERIENCE PROCESS



## A CLEAN HYDROGEN MICROGRID CAN POWER OVER 100 HOMES

[H2]

# [H2] FUEL CELL:

Where hydrogen reacts with oxygen to create renewable electricity, with the only by-products being water vapor and heat.

## [H2] BLENDING SYSTEM:

Blending up to 20% clean hydrogen with natural gas for use in the [H2] home's gas appliances.

#### [H2] STORAGE SYSTEM:

CLEAN

Where clean hydrogen made by the electrolyzer, is stored —for days, weeks, or even months.

#### H2O CHILLER:

Cools the electrolyzer system utilizing a closed-loop glycol solution.

## [H2] BATTERY SYSTEM:

Feeds renewable electricity from the solar panels for use within the entire microgrid.

#### [H2] E&I HUB:

The brains of the system.

The Hub controls the [H2] microgrid using data processors, industrial circuit breakers, and grid controllers.

It keeps the systems running at optimal performance.

#### [H2] ELECTROLYZER:

Uses solar energy to separate purified water into hydrogen (H2) and oxygen (O2). The oxygen is safely released into the air, and the clean hydrogen (H2) goes into

6 the [H2] Storage System.

### Clean Hydrogen Microgrid

# **Key Benefits**

#### SUSTAINABILITY

Uses renewable solar to produce clean hydrogen for community energy needs.

Zero greenhouse gas emissions.



#### SCALABILITY

Scalable to serve neighborhoods, industry, commercial buildings, and transportation.

Promotes the broad development of clean hydrogen and related clean energy uses.



## RESILIENCY AND RELIABILITY

Supports communities with clean energy all year long.

Provides reliable energy supply during power outages and Public Safety Power Shutoffs(PSPS).



# We are committed to leading a decarbonized future

- A culture centered on safety, reliability, and innovation
- > First-in-class focus on serving our customers
- A highly skilled, diverse, and inclusive workforce

For more information, please visit:

socalgas.com/mission



#### WHY SOCALGAS?

SoCalGas is the first and largest natural gas utility in the United States to announce its aim to have net zero greenhouse gas emissions by 2045

- On track to deliver 20% renewable natural gas by 2030
- 2 Investing in more hydrogen pilot projects than any other utility company
- Operating a 100% zero-emission fleet by 2035



[H2] Innovation Experience is an important part of our expanding portfolio of clean energy projects that includes Angeles Link.

