

BUILDING A CLEANER ENERGY FUTURE

Moreno Modernization Project



A  Sempra Energy utility®



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Commitment to Sustainability

SDG&E and SoCalGas support California's aggressive climate goals and are committed to achieving net zero GHG emissions by 2045.

Our climate pledge covers not only the direct emissions associated with our collective operations, but also of indirect emissions resulting from our customers' use of energy delivered by SDG&E and SoCalGas.

To help decarbonize the economy, we are building the infrastructure and fostering innovations such as green hydrogen and energy storage to help accelerate California's energy transition.





The Moreno Compressor Station uses compressors to move natural gas through our network of pipelines to serve customers in portions of Riverside County and San Diego County.

More than 95 percent of the natural gas used in SDG&E's service territory is moved by the Moreno Compressor Station.

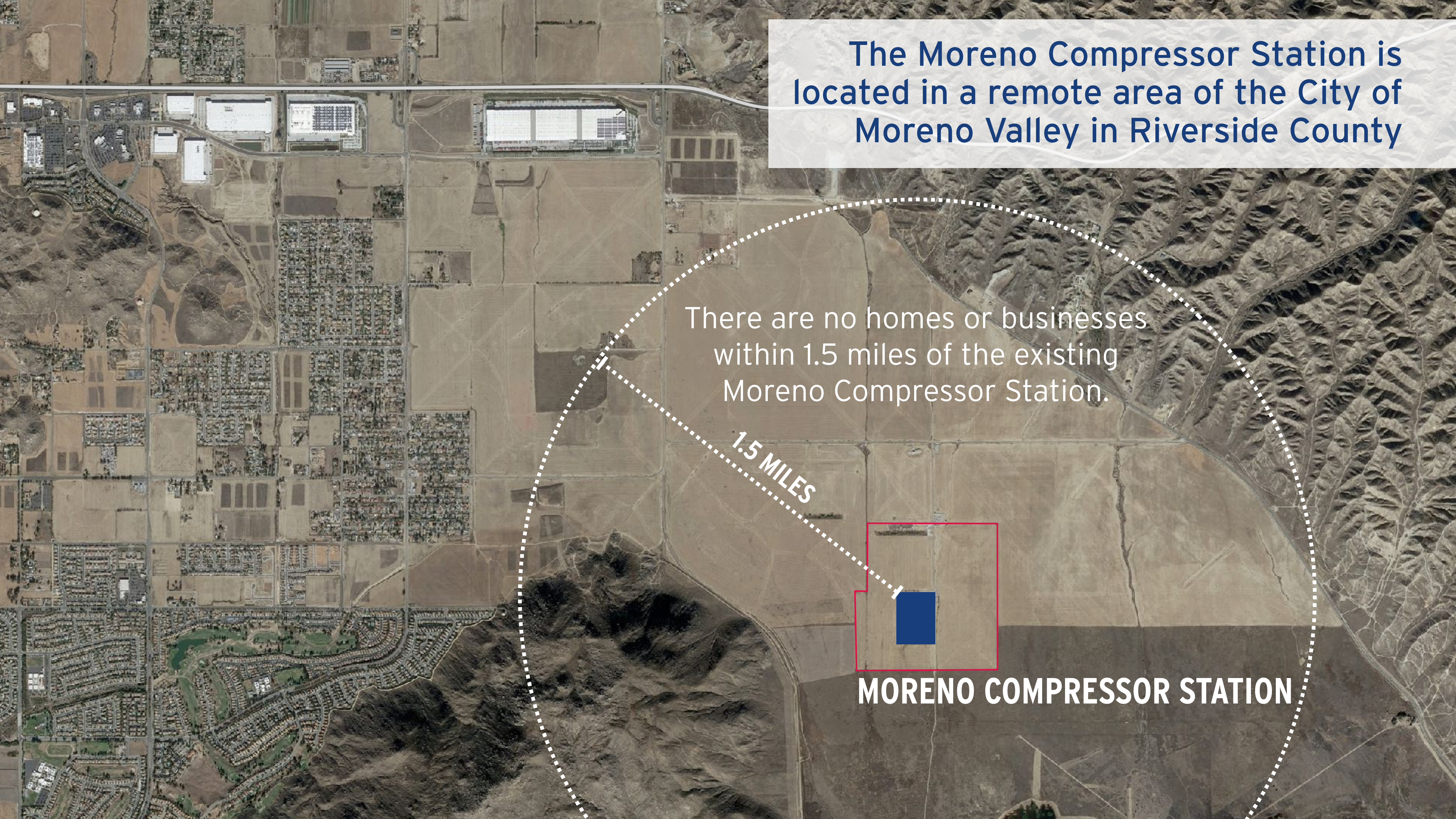
In the next quarter century, California's power demand is expected to double, and this will require an even stronger integrated gas and electric energy system.

The Moreno Compressor Station is located in a remote area of the City of Moreno Valley in Riverside County

There are no homes or businesses within 1.5 miles of the existing Moreno Compressor Station.

1.5 MILES

MORENO COMPRESSOR STATION



RETIRING EXISTING AGING EQUIPMENT

1. Three compressors installed in the 1950s
2. Four compressors installed in the 1970s
3. Two compressors installed in the 1990s

UPGRADING STATION EQUIPMENT

1. Two new zero-emission, electric-driven compressors
2. Two new lower-emission, turbine-driven compressors
3. Retrofit existing unit with emission reduction equipment
4. Green Hydrogen fuel cells and storage tanks
5. Company green hydrogen fueling station

The background of the slide is a scenic landscape photograph. It shows a vast mountain range with rolling hills and valleys. In the foreground, there are dark, rocky outcrops and dense green trees. The middle ground features several layers of mountain ridges, some covered in green vegetation and others appearing more barren. In the far distance, a hazy city skyline is visible under a pale, overcast sky. The overall tone is natural and serene.

Project Description

The modernization project will install new compressor equipment that will go beyond regulatory requirements to comply with recently amended South Coast Air Quality Management District (SCAQMD) air quality rules.

The project will also integrate clean energy decarbonization technologies and blend green hydrogen into the fuel stream for the new state-of-the-art compressors.

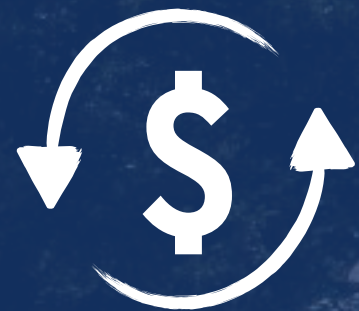
Project Benefits



Reduces air emissions such as NOx by 70%. Equivalent of removing 36,000 passenger vehicles off the road each year.



Advance the clean energy transition by providing resiliency to support increased dependence on renewable electricity.



Invests more than \$500 million in Moreno Valley.



Provides an estimated 200 construction jobs for 24 to 36 months.

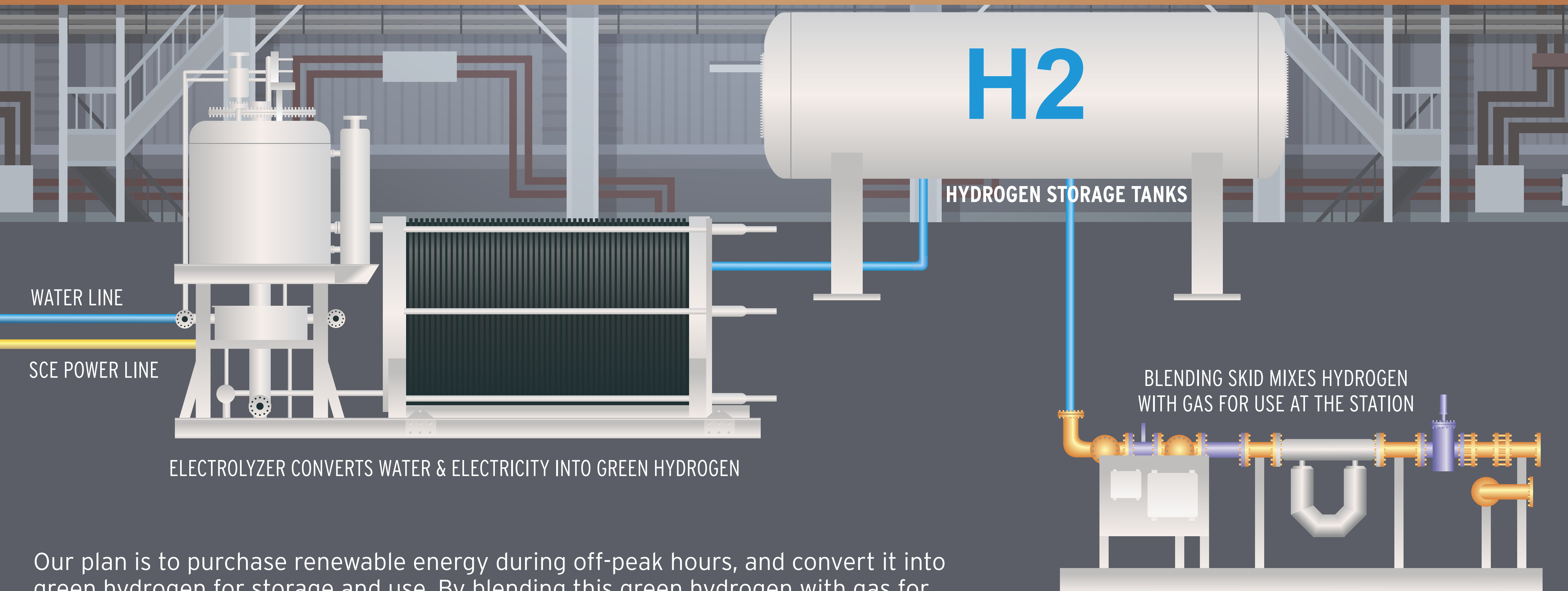


Enhances reliability and efficiency.



Produces 750 kg of green hydrogen per day. Equivalent to the amount of renewable energy to fuel 300 homes per day, or approximately 120 vehicles.

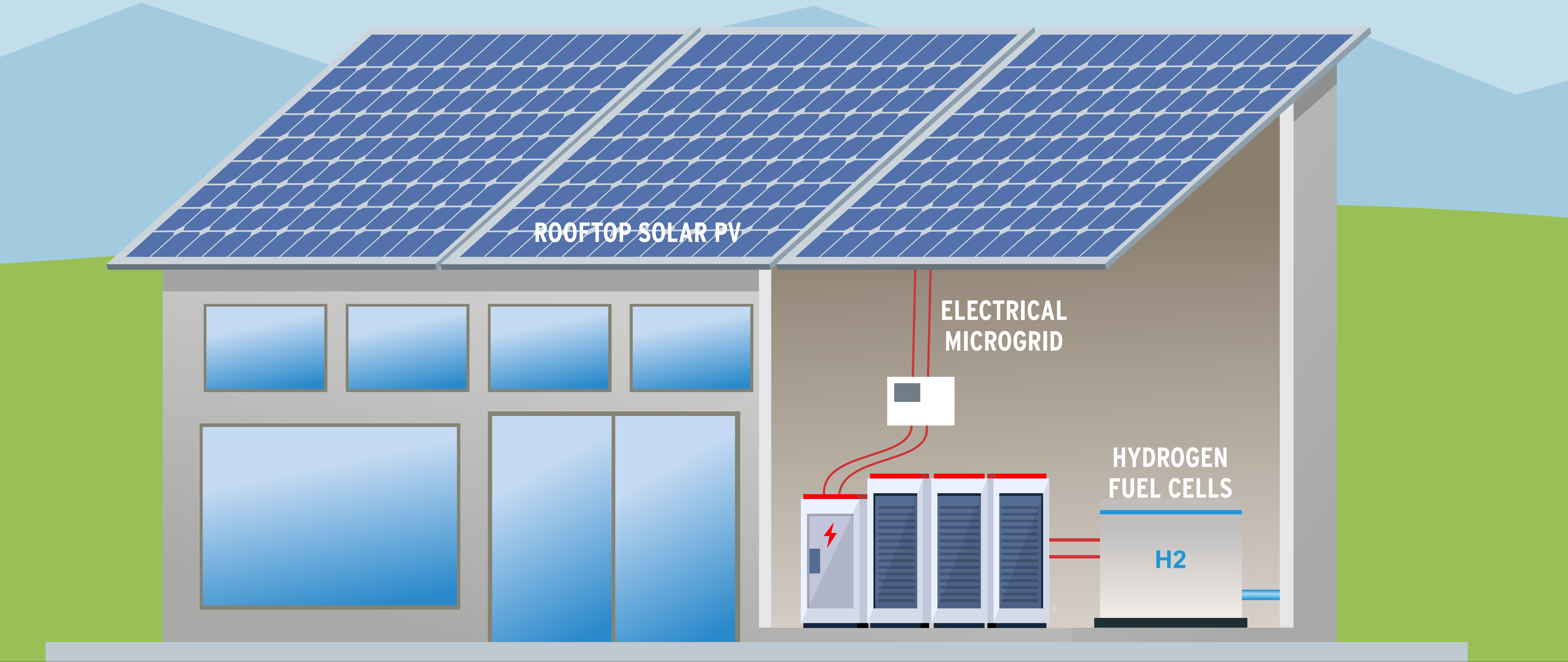
Hydrogen Blending



Our plan is to purchase renewable energy during off-peak hours, and convert it into green hydrogen for storage and use. By blending this green hydrogen with gas for use at the plant we will reduce our GHG emissions from the new compressors.

An electrical microgrid with green hydrogen fuel cells, a battery energy storage system, and rooftop solar PV can provide a reliable backup power supply and help avoid the use of non-renewable electricity during peak-demand hours.

Electrical Microgrid



BATTERY ENERGY STORAGE SYSTEM

Hydrogen Fueling

FOR COMPANY VEHICLES



The project also includes the creation of a green hydrogen fueling station for our company vehicles. This supports our goal of having a 100% zero emission fleet by 2035. We have an interim goal of replacing 50% of its fleet to run on clean fuels by 2025.



ELECTRIC GENERATION

Between 30-50% of natural gas delivered to San Diego fuels region's power plants, helping support solar and wind power.



CLEAN INNOVATION

Renewable Natural Gas. Potential for CA to produce 300 billion cubic feet of RNG per year from organic waste.

Fuel Cells. Natural gas and RNG to produce clean, efficient and reliable power.

Power to Gas. Another form of energy storage.



OUR MILITARY

One of SDG&E's top three natural gas users and represents one out of every four jobs.



OUR HEALTHCARE

25 hospitals and 26,000+ healthcare/assistance facilities employ 140,000 people, providing more than \$6.9 billion in wages.



OUR MANUFACTURING

3,000 manufacturing companies support more than 105,000 jobs and the \$7 Billion industry is the 6th highest-paying.



Safety Protocol

The Moreno Compressor station has been operating safely and reliably since the 1950s.

The facility is equipped with a series of safety systems that protect the station and surrounding communities.

Methane detection sensors and fire detection systems are installed on every compressor unit - frequently checked and verified for proper operations.

The station is staffed 24 hours a day, 7 days a week.

SoCalGas and SDG&E recently set a goal of achieving net zero greenhouse (GHG) emissions in our operations and the energy delivered to customers by 2045.

NET ZERO 2045

These net-zero goals align with California's goal of achieving a carbon neutral economy by 2045 and the Paris Climate Agreement



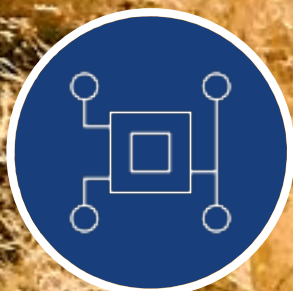
NET ZERO 2045



DECARBONIZATION



DIVERSIFICATION



DIGITALIZATION

Hydrogen blending is an innovative component of achieving a decarbonized energy system.



DECARBONIZATION

The upgraded Moreno compressor station will **ENABLE THE DELIVERY OF RENEWABLE GAS RESOURCES** from our state's abundant organic waste streams.



DIVERSIFICATION

Improved energy **RELIABILITY** through
the integration of modern compressor
assets and onsite microgrid's **RENEWABLE
ELECTRICITY GENERATION.**



DIGITALIZATION





NET ZERO 2045

Modernizing the Moreno Compressor Station to use cleaner fuels like hydrogen will help California and SoCalGas/SDG&E meet California's climate commitment goals.