



# ASPIRE 2045

Sustainability and  
Climate Commitment  
to Net Zero



# Letter From Scott Drury

At SoCalGas we live by three values: do the right thing, champion people, and shape the future. These values permeate our company. They guide how we think and drive our actions. As one of America's largest energy providers, our values are the lens through which we see every opportunity and challenge. From energizing the lives of 22 million Californians, to contributing to the competitiveness of the world's fifth largest economy, our values are the foundation of all we do.

Our mission is to build the cleanest, safest, most innovative energy company in America. With our values providing a strong foundation, our mission statement presents an actionable framework of purpose and intent. At SoCalGas, we're dedicated to leading the transition to a decarbonized energy system. Through collaboration and partnership, California can develop clean energy solutions at scale and serve as a global beacon for energy innovation.

Driven by our values and mission, SoCalGas is excited to embark on ASPIRE 2045, a sustainability strategy that includes a bold commitment to achieve net zero greenhouse gas emissions in our operations and delivery of energy by 2045.

ASPIRE 2045 is a natural extension to our decades-long industry leadership. We were the first gas utility in America to install smart meters and pioneered renewable natural gas. We are leading in hydrogen innovations and outperforming mandated emissions reduction targets.

While impossible to predict what the energy ecosystem will look like more than two decades from now, we know it must be clean, safe, reliable, and resilient. Californians will need an increasingly integrated and decarbonized portfolio of energy sources and tools that are affordable, scalable, and can meet critical peak periods of energy demand. Our success, economic competitiveness, and quality of life depend on it.





1

## DECARBONIZATION

Reducing carbon intensity across all economic sectors is foundational to achieving net zero. It requires energy efficiency, renewable electricity, renewable gases, long duration storage, carbon management, and other technologies to be viable at scale.

2

## DIVERSIFICATION

Developing a diversified portfolio of clean energy sources, distributed networks, tools, and applications is the only way to achieve society's clean energy goals. Diversification also serves as a necessary risk management tool, delivering resiliency to the system and protecting against the uncertainties of the future.

3

## DIGITALIZATION

Deploying advanced technologies and analytics to improve planning, safety, resiliency, and the integration of real-time information to benefit participants across the energy value chain.

SCOTT LETTER CONTINUED...



Innovation and the rapid development of new technologies will be vital to our success. Three SoCalGas capabilities are integral to achieving California's energy transition and net zero goals.

1. Decarbonization: Reducing carbon intensity across all economic sectors is foundational to achieving net zero. It requires energy efficiency, renewable electricity, renewable gases, long duration storage, carbon management, and other technologies to be viable at scale.

2. Diversification: Developing a diversified portfolio of clean energy sources, distributed networks, tools, and applications is the only way to achieve society's clean energy goals. Diversification also serves as a necessary risk management tool, delivering resiliency to the system and protecting against the uncertainties of the future.

3. Digitalization: Deploying advanced technologies and analytics to improve planning, safety, resiliency, and the integration of real-time information to benefit participants across the energy value chain.

We believe we can shape the future. SoCalGas' role in the world is greater than the molecules we deliver. A successful energy transition requires leadership, innovation, effective policy, and broad collaboration.

We are excited to share our net zero climate commitment, which is just one element of our environmental, social, and governance initiatives. Throughout 2021, we will share additional plans and commitments, including: advancing our industry-leading diversity, equity, and inclusion programs for employees; increasing economic opportunities for diverse suppliers; and engaging in the communities we are privileged to serve.

On behalf of the amazing women and men of SoCalGas, we look forward – with great enthusiasm – to working with you to achieve ASPIRE 2045.

  
Scott Drury | CEO



A full-page background image of a sunset over a beach. The sky is a deep orange, and the silhouettes of numerous palm trees are visible against the bright horizon. In the foreground, the ocean waves are breaking onto a sandy beach. A few small figures of people can be seen on the beach and in the water.

# THE EVOLUTION OF ENERGY

## What's Inside

SUSTAINABILITY AT SOCALGAS  
CLIMATE COMMITMENT TO NET ZERO  
LEADERSHIP IN THE ENERGY TRANSITION  
OUR PROGRESS TO NET ZERO  
WHAT'S TO COME





# SUSTAINABILITY

A T S O C A L G A S



- Sustainable business practices drive resilient operations and create long-term value for our stakeholders.

SoCalGas completed an enterprise-wide effort with Sempra Energy to align our strategic focus and sustainability strategy on four pillars.<sup>1,2</sup> These pillars help us identify and manage key environmental, social, and governance initiatives, set bold goals in each area, and focus our communications to provide progress updates to stakeholders.

## ASPIRE 2045

IS GUIDED BY  
FOUR PILLARS »



## » Enabling the Energy

### T R A N S I T I O N

The intersection of clean energy technologies, sound policy, and capital investments, will accelerate the affordable energy transition.

The energy transition requires expanding on proven and new technologies in energy efficiency, renewable natural gas, renewable electricity, fuel cells, hydrogen, and carbon management.

We commit to investing in a diverse portfolio of technologies and applications to decarbonize.

## » Championing

### P E O P L E & C O M M U N I T I E S

We put our employees and the communities we serve first.

Our employees are our most valuable resource. We place the highest priority on their wellness, safety, and empowerment.

We invest in our communities through purposeful charitable giving, partnerships, and volunteerism.

We will continue to cultivate our workplace and communities to promote an inclusive and respectful environment that thrives on diversity.

## » Driving Resilient

### O P E R A T I O N S

Infrastructure is our business. SoCalGas operates over 100,000 miles of transmission and distribution pipelines and storage assets, and over six million customer meters across 500+ communities.

Our resilient underground pipeline infrastructure prevents, withstands, adapts to, and quickly recovers from disruption, to enhance and complement an energy ecosystem made of clean electrons and clean molecules.

## » Achieving World Class

### S A F E T Y

As the nation's largest gas distribution utility, with over 7,800 employees serving 22 million customers, safety is foundational to our business.

SoCalGas' Safety Management System (SMS) framework embeds safety in everything we do.<sup>3</sup> SMS enhances our safe operations, strengthens our safety culture, and improves our overall safety performance within our workplace and communities.





# CLIMATE COMMITMENT TO NET ZERO

Our climate commitment is to achieve net zero greenhouse gas emissions in our operations and delivery of energy by 2045.





**SoCalGas** is the largest gas distribution utility in the nation to include scopes 1, 2, and 3 emissions.

### SCOPE 1

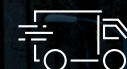
Direct GHG emissions that occur from sources owned or controlled by the company.



FACILITY GAS USAGE



TRANSMISSION & DISTRIBUTION SYSTEM



VEHICLE FLEET

### SCOPE 2

Indirect GHG emissions associated with the generation of purchased electricity consumed by the company.



FACILITY ELECTRICITY USAGE

### SCOPE 3

Indirect GHG emissions from sources not owned or controlled by the company.



RESIDENTIAL



FLEET & LOGISTICS



COMMERCIAL & INDUSTRIAL



ELECTRIC GENERATION

Climate change, and society's response to it, will profoundly affect the way energy is produced, delivered, and consumed over the coming decades. The changing climate requires an energy ecosystem that is resilient to extreme weather, wildfires, and drought, while delivering reliable, affordable, and increasingly low carbon energy to customers.

Our climate commitment is to achieve net zero greenhouse gas emissions in our operations and delivery of energy by 2045. In doing so, SoCalGas becomes the largest gas distribution utility in the nation to include

scopes 1, 2, and 3 emissions in our target, aligning with the Paris Climate Agreement's recommendations to limit global warming to 1.5°C by achieving net zero by mid-century.<sup>4</sup>

Our commitment supports California's 2045 carbon neutrality goal and demonstrates the gas system's essential role in advancing a carbon neutral economy.<sup>5</sup> In addition to the state's bold climate goal, policymakers must also put additional necessary regulatory frameworks in place for a successful energy transition that will deliver reliable, resilient, and affordable energy to Californians.

This is an opportunity to decarbonize the gas and electric networks, while playing a broader role in decarbonizing other sectors such as agriculture, waste, and transportation. It is an even bigger opportunity to keep California at the forefront of innovation and economic development by creating a model where local solutions are globally scalable and have a far-reaching impact.

With these great opportunities, come great challenges. As we look towards a clean energy future, we are managing not only the energy needs of today, but of the next quarter

century, when California's power requirements are expected to nearly double.<sup>6</sup> This growing challenge will demand an even stronger integrated energy system that is clean, reliable, resilient, and affordable for its residents.

With our parent company, Sempra Energy, we are uniquely positioned to unite innovation in energy technology and infrastructure with the growing demand for lower-carbon energy.



# Propelling Towards the Future

Building on our efforts to date, we have started to chart our goals to further our path towards net zero.<sup>7</sup>



## BY 2025 WE PLAN TO

- + Achieve net zero energy for 100% of SoCalGas' newly constructed buildings and major renovations of buildings over 10,000 square feet.<sup>8</sup>
- + Replace 50% of SoCalGas' over-the-road fleet with electric, hybrid, renewable gas, and fuel cell electric vehicles.<sup>9</sup>
- + Complete five hydrogen pilot projects.
- + Establish statewide hydrogen blending standards.
- + Exceed the state requirements to demonstrate a reduction of fugitive methane emissions 20% by 2025.<sup>10</sup>
- + Reduce methane emissions intensity of our distribution system to 0.22% or less of total gas delivered, contributing to the collective goal of ONE Future members.<sup>11</sup>
- + Deliver 5% renewable natural gas (by 2022).<sup>12</sup>
- + Increase procurement of responsibly sourced gas.<sup>13</sup>

## BY 2030 WE PLAN TO

- + Eliminate 100% of vented gas during planned transmission pipeline work (excluding emergency repairs).
- + Achieve net zero energy for 50% of all SoCalGas existing buildings.<sup>14</sup>
- + Develop hydrogen infrastructure solutions for the 2028 Olympics.
- + Exceed California's goal to reduce fugitive methane emissions 40% by 2030.<sup>15</sup>
- + Deliver 20% renewable natural gas.<sup>16</sup>
- + Establish a hydrogen industrial cluster with industry partners.

## BY 2035 WE PLAN TO

- + Operate a 100% zero emission over-the-road fleet.<sup>17</sup>
- + Achieve net zero energy for 100% of SoCalGas buildings.<sup>18</sup>

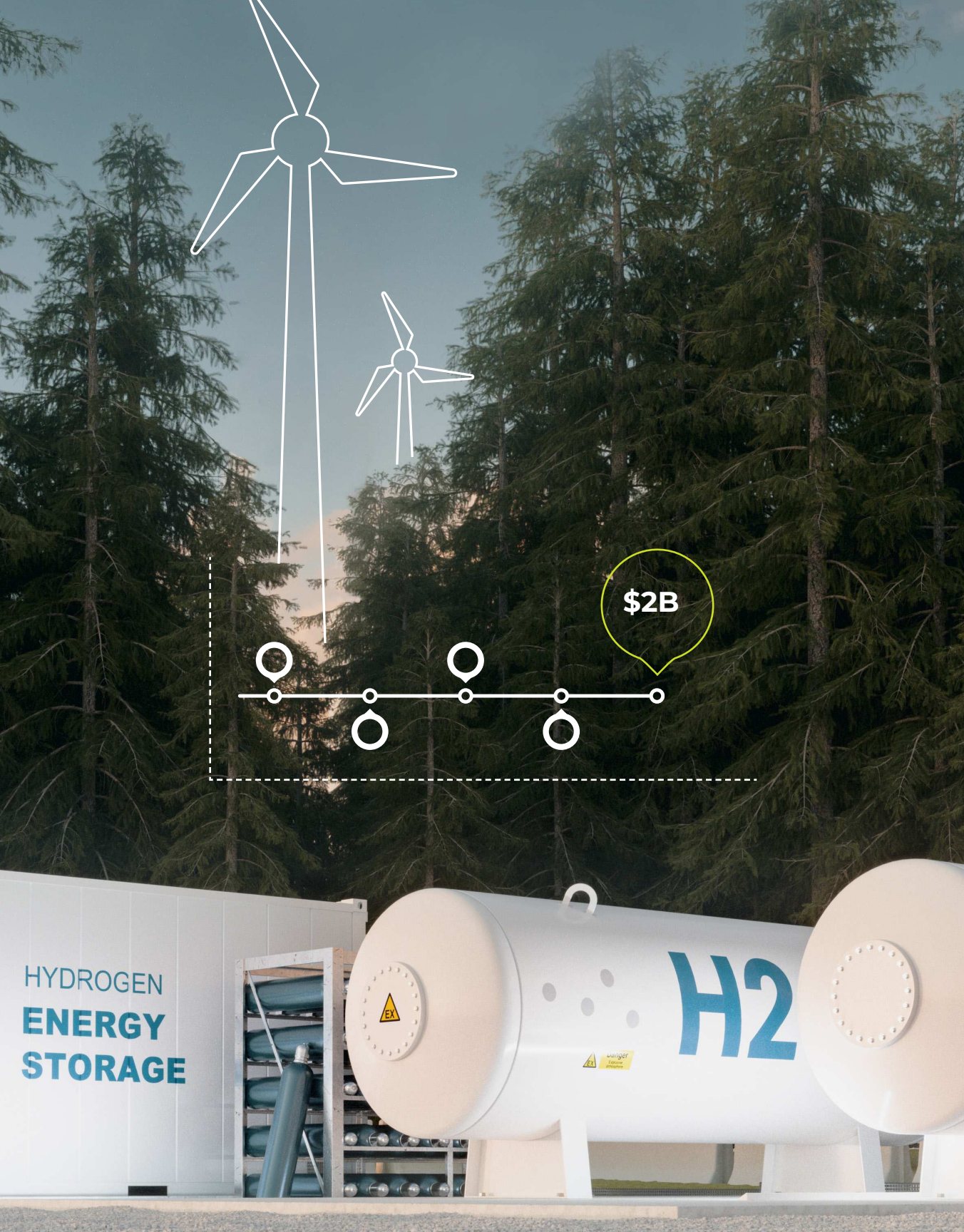
We will add additional goals and be transparent about our progress.





# LEADERSHIP IN THE ENERGY TRANSITION





# SoCalGas Will Accelerate TO CLEANER FUELS

SoCalGas will accelerate the shift to cleaner fuels, complementing wind and solar energy, and add clean fuels, such as hydrogen, to the energy mix. Over the next five years, we plan to invest more than \$2 billion to modernize our infrastructure to decarbonize, diversify, and digitalize our business.

**Specifically, we will concentrate on three key areas:**

- 1 Leveraging our gas infrastructure to provide the energy ecosystem with flexibility, storage, reliability and resiliency.
- 2 Investing in innovative technologies to create a portfolio of decarbonization solutions for an evolving energy transition.
- 3 Advancing through collaboration to engage, inspire, and empower partners on local, state, and global climate goals.



# Leveraging the Gas Infrastructure

For decades, our infrastructure has been the backbone of affordable and reliable energy in California. The gas system provides flexible fuel delivery, long-term storage, and reliable and resilient energy for customers.

## FLEXIBILITY

The flexibility of the gas system complements decarbonization of the electric grid and accelerates the growth of renewable energy procurement.<sup>19</sup> Wind and solar are powerful primary sources of renewable energy but their variability can result in over- or under-supply of energy.<sup>20</sup>

By contrast, gas supply is readily available. It provides continuous service and transport capacity, safeguarding against interruption of service to customers. These inherent characteristics also hold true for low to negative carbon forms of gas supply, such as hydrogen and renewable natural gas.<sup>21</sup>

## STORAGE

While there has been great progress with battery storage, it is insufficient for storing wind and solar energy for long periods of time. When more renewable energy is generated than customers can use, such as during the middle of the day, a significant portion of California's solar and wind energy is curtailed.<sup>22</sup> Conversely, on hot days when the sun goes down, energy is in high demand. This trend is likely to increase as renewables comprise a larger portion of grid power, exporting more unused renewable energy and impacting energy affordability.<sup>23</sup>

Gas infrastructure, on the other hand, can serve as a large, long-duration energy storage system.<sup>24</sup> For example, when renewable power is generated and unable to be used immediately, hydrogen can be produced from the excess renewable electricity and stored for days, weeks, or even months, making clean energy readily available from season to season.<sup>25</sup>

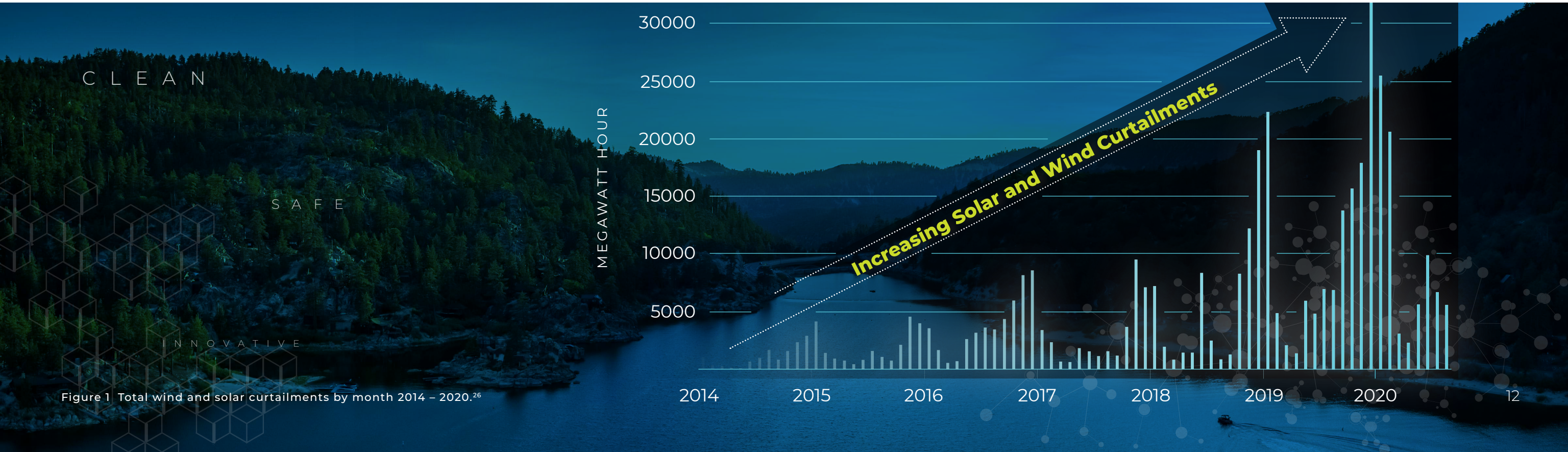


Figure 1 Total wind and solar curtailments by month 2014 – 2020.<sup>26</sup>



RELIABILITY AND RESILIENCY

Pairing clean molecules with clean electrons across our networks builds reliability and stability. Disruptive events such as extreme weather also underscore the importance of the gas delivery system to maintain uninterrupted service to customers and critical facilities. The gas infrastructure, which is built underground, provides protection from major disruptive events and maintains the flexibility needed for reliability of service. In fact, essential service providers such as hospitals, military bases, and data server farms, rely on gas to maintain public safety.<sup>27, 28, 29</sup> Some hospitals have implemented a combination of fuel cell systems connected to the gas grid for back-up power in the event of an electrical outage, allowing them to continue to perform surgeries.<sup>30</sup>

SoCalGas has invested billions of dollars to realize a cleaner energy future. We will continue to invest in our resilient system to deliver safe, reliable, affordable, and increasingly decarbonized energy to our customers and communities in alignment with California’s carbon neutrality goals.



Pairing clean molecules with clean  
electrons builds RELIABILITY  
AND STABILITY



# Investing in I N N O V A T I V E T E C H N O L O G I E S

We continue to innovate, advancing existing and new technologies in distributed energy, hydrogen technologies, carbon capture utilization and sequestration, and cleaner fuels like renewable natural gas and hydrogen.



## RENEWABLE NATURAL GAS

- » Anaerobic digestion
- » Biomass waste
- » Thermal conversion
- » Renewable natural gas interconnections



## DISTRIBUTED ENERGY

- » Fuel cells
- » Combined heat and power
- » Microgrid infrastructure



## HYDROGEN

- » Hydrogen pipeline infrastructure
- » Electrolysis
- » Pyrolysis
- » Hydrogen blending
- » Transportation fuel cell technology
- » Hydrogen fueling infrastructure



## CARBON CAPTURE UTILIZATION AND SEQUESTRATION

- » Capture carbon dioxide to sequester or use
- » Utilize carbon in industrial applications
- » Direct air capture

## PROGRESS

- » Research, development + demonstration projects
- » Developing partnerships to commercialize technologies
- » Engineering and commercial progress underway; launched demonstration hydrogen projects in 2020; expect to launch larger scale projects in 2022-2023



# Technology Spotlight

[H2]

## H Y D R O G E N   H O M E <sup>31</sup>

SoCalGas' H2 Hydrogen Home demonstration project will showcase the role hydrogen must play in attaining California's goal of carbon neutrality. H2 Hydrogen Home will include solar panels, an electrolyzer (power-to-gas), a battery, and a fuel cell. The demonstration will convert solar energy into clean hydrogen, which can be stored, blended into the gas grid, and used in the fuel cell for the home's electricity use.

[H2]

## C O M M O N S <sup>32</sup>

As part of the statewide effort to transport hydrogen through the gas network, SoCalGas is conducting hydrogen blending research and lab testing to support demonstration opportunities with the potential to increase blending to 20%.

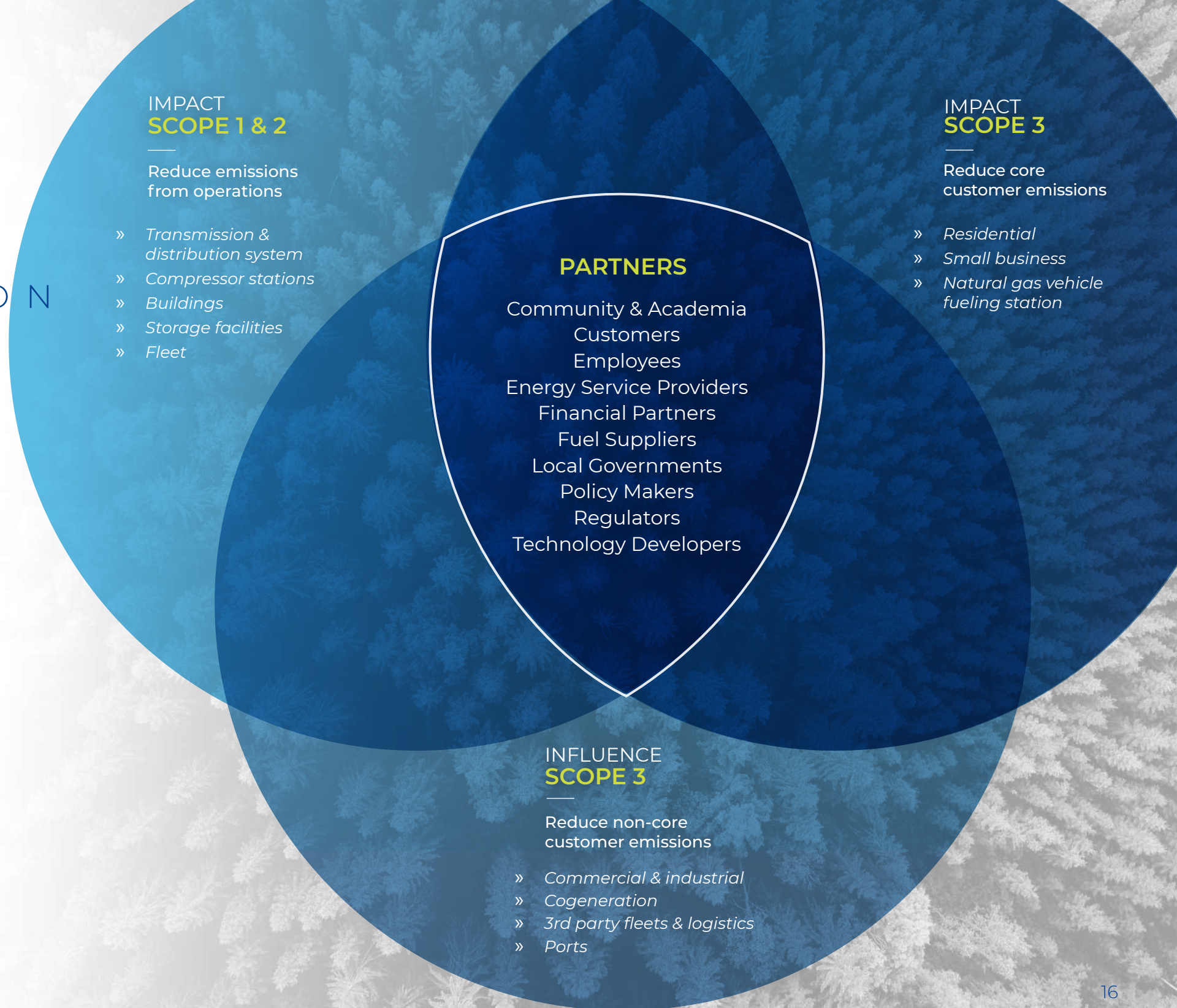


# Advancing Through COLLABORATION

California climate goals are ambitious, necessary, and we support them. Like any complex mission, the journey to net zero requires collaboration and new thinking. To meet California's climate change goals, cooperation among utilities, policymakers, businesses, and community organizations is essential. Working together, we can reduce emissions from transportation, buildings, hard-to-decarbonize industries (e.g., metals, glass and cement manufacturing, aerospace, heavy-duty transportation, rail, and marine), and the energy system itself.

We procure gas for most of our residential and small commercial customers. We also have large customers (e.g., electric generators, industrial users) who utilize our pipeline and storage infrastructure but purchase their own gas from other energy service providers. These large customers make up the biggest portion of SoCalGas' scope 3 emissions and are essential to reducing them. We are focused on working with our customers to jointly chart a path to net zero as these scope 3 emissions are not produced or controlled by SoCalGas.

Because climate change is a global challenge, SoCalGas works with partners in Europe, Australia, and Canada to leverage best practices and lessons learned to accelerate our progress to net zero.<sup>33</sup>





# SoCalGas Emission Sources & Partners

## TO ACHIEVE NET ZERO TARGET

SoCalGas will leverage existing partnerships and build new ones to transform California's energy system to meet one of our generation's greatest challenges.

Our emissions reduction strategies, coupled with new products and services, will be mobilized across our own operations and those of our customers.

SoCalGas is a leading voice, but not the only voice. It will take the sustained will of the business community to innovate and leverage resources to confront the global threat of climate change. It will also require the support of policymakers to put the necessary regulatory frameworks in place to attract robust investments.

As part of our drive to net zero, SoCalGas will continue to partner with universities, national labs, industry consortia, and public agencies to advance clean energy technologies.

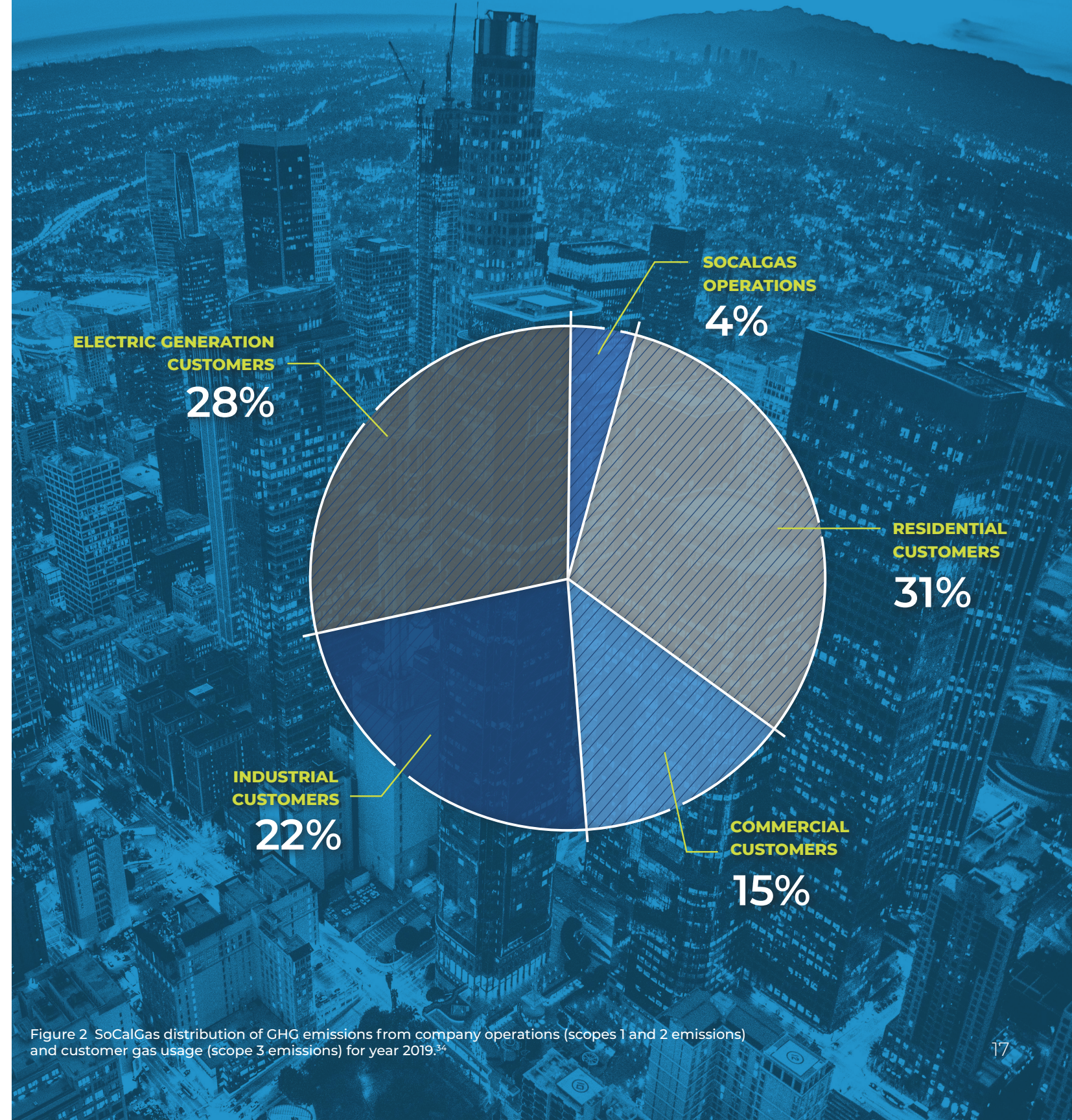


Figure 2 SoCalGas distribution of GHG emissions from company operations (scopes 1 and 2 emissions) and customer gas usage (scope 3 emissions) for year 2019.<sup>44</sup>



# Partnerships Spotlight

[H2]

[H2]

## TRANSPORTATION MODULAR FUEL CELL ENGINE<sup>35</sup>

The Cummins Modular Fuel Cell Engine is a partnership with US Department of Energy (DOE), Cummins, and South Coast Air Quality Management District (South Coast AQMD) to demonstrate a fuel cell engine for heavy-duty Class 8 trucks and transit buses that can be customizable to fit each vehicle and power need. This project aims to bring a zero emission vehicle technology solution to the transit and heavy-duty truck industry.

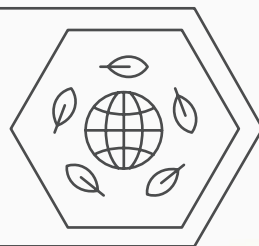
## SILVERSTARS<sup>36</sup>

The Solar Thermochemical Advanced Reactor System (STARS) is a combustion-free concentrated solar thermal and electric induction heated technology developed in partnership with the DOE, Pacific Northwest National Laboratory, and the STARS Corporation. The STARS project produces hydrogen while reducing GHG emissions.

## PURECOMP<sup>37</sup>

Purecomp is an electrochemical hydrogen separation and compression technology project in partnership with a Netherlands-based company, HyET Hydrogen. It supports clean hydrogen transportation through a common carrier pipeline system, extracting hydrogen where it is needed.





# OUR PROGRESS

## T O N E T Z E R O

Since California enacted Assembly Bill 32, the Global Warming Solutions Act of 2006, SoCalGas has been investing in early decarbonization efforts, diversification through expanded fuel options, and increased business efficiency and effectiveness with implementation of digital solutions.







## DECARBONIZATION

- » Reduced over 1.2 million metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) and \$1 billion in avoided energy costs with the nation's largest gas energy efficiency program.<sup>38</sup>
- » Reduced over 1 million MTCO<sub>2</sub>e two decades prior to the adoption of any mandatory compliance requirements as a founding member of the EPA's Natural Gas STAR program and advanced leak detection and repair efforts to support the natural gas leakage abatement program.<sup>39</sup>
- » Partnered with Cummins-Westport, California Energy Commission (CEC), and South Coast AQMD to develop a natural gas engine that helped the Los Angeles Metropolitan Transportation Authority become the nation's largest and cleanest transit fleet by converting buses from diesel fuel to compressed natural gas. The upgraded engines and use of renewable natural gas saved approximately 54 thousand MTCO<sub>2</sub>e per year.<sup>40</sup>

Figure 3: Equivalent to the emissions reduced from taking over 700,000 cars off the road for a year.<sup>48</sup>



## DIVERSIFICATION

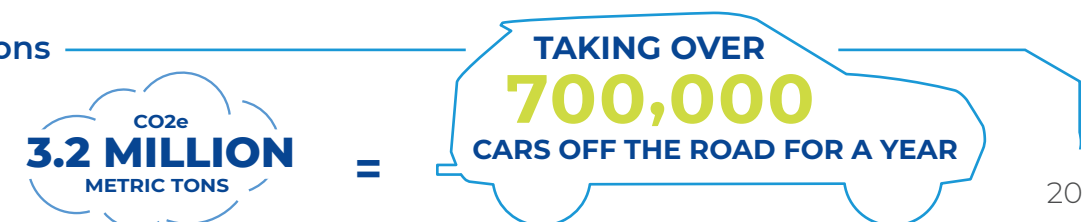
- » Dispensed 100% renewable natural gas for all utility-owned vehicle fueling stations, including renewable natural gas supplies from a pipeline-injected dairy digester cluster, a first for California.
- » Transported low and negative carbon fuel to medium and heavy-duty vehicles, contributing to the combined reduction of over 1 million MTCO<sub>2</sub>e annually.<sup>41</sup>
- » Partnered with the University of California, Irvine to demonstrate the nation's first power-to-gas hydrogen pipeline injection project.<sup>42</sup> This project used surplus renewable power to produce hydrogen for blending into the gas system, providing long-term energy storage.

Together, these actions reduced GHG emissions by over 3.2 million metric tons CO<sub>2</sub>e.<sup>47</sup>



## DIGITALIZATION

- » Installed smart meters for the gas system - **first in the nation** - resulting in over 3 million therms saved, equivalent to avoiding 18,000 MTCO<sub>2</sub>e per year.<sup>43</sup>
- » Aerially mapped our methane emissions - **first in the nation** - creating one of the best performing systems in the country.<sup>44</sup> The early EPA Natural Gas STAR volunteer and advanced leak detection and repair efforts support the natural gas leakage abatement program target of 20% fugitive reduction by 2025.<sup>45</sup>
- » Awarded 'Most Innovative Utility' in the U.S. by Utility Analytics Institute - for innovation in using data to increase safety, save money for customers, improve customer service, conserve energy, and cut greenhouse gas emissions.<sup>46</sup>







# WHAT'S TO COME

We Will Continue to Invest Towards a Net Zero Future.

> While we have made significant progress already, we know we must do more as we orient our business towards a net zero future. We will continue to invest in our infrastructure to build a resilient system capable of delivering reliable, affordable, and increasingly decarbonized energy to our customers.



# Journey Ahead

ASPIRE 2045 is a major endeavor for SoCalGas, representing an evolution in how we will serve our customers and communities into the future. It is also part of a larger enterprise, and in the coming months we will unveil important environmental, social, and governance initiatives that both build out and support our climate commitment.

Climate change is one of humanity’s most pressing challenges and SoCalGas knows California can rise to meet it. While our company does not have all the answers, we are contributing to a successful energy transition through leadership, innovation, and broad collaboration. Our gas system’s ability to deliver reliable, resilient, and affordable energy to Californians means we have a major role to play in the journey to net zero.

We are innovating towards a sustainable future by doing the right thing, championing people, and shaping the future.







N E T Z E R O 2 0 4 5





# References & Information Regarding Forward-Looking Statements

1. SoCalGas is one of five separately reportable segments under Sempra Energy, a California-based holding company with infrastructure investments in North America.
2. For more information, see Sempra Energy's 2019 Corporate Sustainability Report at 14-23, available at: <https://www.sempra.com/sustainability/sustainability-report>.
3. For more information, see SoCalGas' 2020 Gas Safety Plan at 7-9, available at: <https://www.socalgas.com/sites/default/files/2020%20SCG%20Gas%20Safety%20Plan%20Final.pdf>.
4. See Joeri Rogelj et al., IPCC Special Report on Global Warming of 1.5, Chapter 2: Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development, Intergovernmental Panel on Climate Change (IPCC) (2018), available at: [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15\\_Chapter2\\_Low\\_Res.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter2_Low_Res.pdf); see also The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, World Business Council for Sustainable Development, World Resources Institute (revised edition) at 25, available at: <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>.
5. Executive Order B-55-18 To Achieve Carbon Neutrality, California Executive Department (September 10, 2018), available at: <https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>.
6. 2021 SB 100 Joint Agency Report: Achieving 100 percent clean electricity in California: An initial assessment, California Energy Commission, California Public Utilities Commission, California Air Resources Board (March 2021) at 70, available at: <https://www.energy.ca.gov/sb100>.
7. See public utility limitations of authority, available at: [https://www.cpuc.ca.gov/natural\\_gas/](https://www.cpuc.ca.gov/natural_gas/).
8. Excludes compressor, transmission, and meters and regulations facilities.
9. Dependent on functional application and availability of vehicle products.
10. See SB 1371, available at: [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=2013201405B1371](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=2013201405B1371).
11. The ONE Future Coalition is a group of 38 natural gas companies working together to voluntarily reduce methane emissions across the natural gas value chain to 1% (or less) by 2025.
12. Specifically, we aim to provide 5% renewable natural gas to our "core service" as defined in SoCalGas' Tariff Rule No. 23, by 2022.
13. "Responsibly sourced gas" is natural gas procured from suppliers that proactively manage methane emissions across their entire gas supply chain.
14. Excludes compressor, transmission, and meters and regulations facilities.
15. See SB 1371, available at: [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=2013201405B1371](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=2013201405B1371).
16. Specifically, we aim to provide 20% renewable natural gas to our "core service," as defined in SoCalGas' Tariff Rule No. 23, by 2030.
17. Dependent on functional application and availability of vehicle products.
18. Excludes compressor, transmission, and meters and regulations facilities.
19. Optionality, Flexibility & Innovation: Pathways for Deep Decarbonization in California, Energy Futures Initiative (May 2019) at 33, available at: [https://static1.squarespace.com/static/EFI\\_CA\\_Decarbonization\\_Full.pdf](https://static1.squarespace.com/static/EFI_CA_Decarbonization_Full.pdf).
20. Id. at 51-52.
21. Building a Resilient Energy Future: How the gas system contributes to US Energy System Resilience (January 2021), available at: [https://gasfoundation.org/wp-content/uploads/2021/01/Building-a-Resilient-Energy-Future-Full-Report\\_FINAL\\_113.21.pdf](https://gasfoundation.org/wp-content/uploads/2021/01/Building-a-Resilient-Energy-Future-Full-Report_FINAL_113.21.pdf).
22. See Managing Oversupply, California Independent System Operator (CAISO), available at: <http://www.caiso.com/informed/Pages/ManagingOversupply.aspx>.
23. Long-Term Viability of Underground Natural Gas Storage in California: An Independent Review of Scientific and Technical Information, California Council on Science & Technology (2018) at 517, available at: [https://ccst.us/wp-content/uploads/Full-Technical-Report-v2\\_max.pdf](https://ccst.us/wp-content/uploads/Full-Technical-Report-v2_max.pdf).
24. UC Irvine Injects P2G Green Hydrogen Into Campus Power Supply, Fuel Cell Bulletin (2017) at 10, available at: UC Irvine injects P2G green hydrogen into campus power supply - ScienceDirect.
25. Jacqueline A. Dowling, et al., Role of Long-Duration Energy Storage in Variable Renewable Electricity Systems, Joule (September 2020), available at: [https://www.cell.com/joule/pdfExtended/S2542-4351\(20\)30325-1](https://www.cell.com/joule/pdfExtended/S2542-4351(20)30325-1).
26. "Wind and Solar curtailment totals by month," Managing Oversupply, CAISO (data retrieved March 6, 2021), available at: <http://www.caiso.com/informed/Pages/ManagingOversupply.aspx>.
27. See Comments by Mick Wasco, Session 1: IEPD Commissioner Workshop on Assessing the Future Role for Microgrids in California, California Energy Commission (July 7, 2020), transcript available at: <https://efiling.energy.ca.gov/getdocument.aspx?tn=234950>. Session 1," Panel 1: What is working and Why for Microgrids: Design Considerations and Operational lessons Learned, July 7, 2020. See also, Fuel Cells Powering Critical Infrastructure, Fuel Cell Technologies Office, US Department of Energy (December 2016), available at: [https://www.energy.gov/sites/prod/files/2016/12/f34/fcto\\_fuel\\_cells\\_during\\_storms.pdf](https://www.energy.gov/sites/prod/files/2016/12/f34/fcto_fuel_cells_during_storms.pdf).

28. Eric Wesoff, Why Are Bloom's Fuel Cells Winning at Data Centers and 'Mission-Critical' Sites?, Green Tech Media (April 14, 2015) at 25, available at: <https://www.greentechmedia.com/articles/read/why-are-blooms-fuel-cells-winning-at-data-centers-and-mission-critical>.
29. See study prepared for SoCalGas: Case Studies of Natural Gas Sector Resilience, ICF (October 2019) available at: <https://www.socalgas.com/sites/default/files/1443742022576/SoCalGas-Case-Studies.pdf>.
30. Jeff Ferenc, Fuel cell generates clean, efficient energy for hospitals, Health Facilities Management Magazine (October 15, 2015), available at: <https://www.hfmmagazine.com/articles/1988-fuel-cell-generates-clean-efficient-energy-for-hospitals>.
31. For more information, see Hydrogen's Role in Clean Energy to Take the Spotlight in SoCalGas' "H2 Hydrogen Home," PR Newswire (December 15, 2020), available at: <https://www.prnewswire.com/news-releases/hydrogens-role-in-clean-energy-to-take-the-spotlight-in-socalgas-h2-hydrogen-home-301193178.html>.
32. For more information, see SoCalGas and SDG&E Announce Groundbreaking Hydrogen Blending Demonstration Program to Help Reduce Carbon Emissions, PR Newswire (November 23, 2020), available at: <https://www.prnewswire.com/news-releases/socalgas-and-sdge-announce-groundbreaking-hydrogen-blending-demonstration-program-to-help-reduce-carbon-emissions->.
33. See SoCalGas, Énergir, GRDF and GRTgaz Announce Collaboration on Low-Carbon and Renewable Gas Initiatives During World Gas Conference, Sempra.com via PR Newswire (June 29, 2018), available at: <https://www.sempra.com/newsroom/press-releases/socalgas-energir-grdf-and-grtgaz-announce-collaboration-low-carbon-and>; see also Australian H2 Expertise Shared With The World, ATCO (December 16, 2020), available at: <https://www.atccom/en-au/about-us/stories/australian-h2-expertise-shared-with-the-world.html>.
34. GHG emissions from company operations represent CO2e emissions from activities associated with transmission, storage, distribution, company fleet, energy usage at facilities, stationary combustion, and refrigerant leaks. Customer GHG emissions represent the CO2e emissions associated with the gas delivered to both core and non-core customers. Emissions were voluntarily reported to The Climate Registry.
35. See SoCalGas Receives Over \$7 Million in Funding from U.S. Department of Energy to Advance Zero- and Near-zero Emissions Vehicle Technologies Nasdaq, Nasdaq.com via PR Newswire (August 26, 2020), available at: <https://www.nasdaq.com/press-release/socalgas-receives-over-%247-million-in-funding-from-u.s.-department-of-energy-to>.
36. For more information, see STARS Technology Corporation's website, available at: <http://starsh2.com/>.
37. Tom DiChristopher, SoCalGas to test hydrogen viability in 2 new projects, S&P Global Market Intelligence (December 16, 2020), available at: <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/socalgas-to-test-hydrogen-viability-in-2-new-projects-61778492>.
38. Total savings in EE program from 2016 to 2020. Data reported to California Energy Data and Reporting System (CEDARS), available at: Summary Report - CEDARS (sound-data.com).
39. Total reduction from voluntary program years 1993 to 2015. 2018 Natural Gas STAR Summary Report: Southern California Gas Company, (2018). See also <https://www.epa.gov/natural-gas-star-program/>.
40. Metro Retires Last Diesel Bus, Becomes World's First Major Transit Agency to Operate Only Clean Fuel buses, Metro.net (January 12, 2011), available at: [https://www.metro.net/news/simple\\_pr/metro-retires-last-diesel-bus/](https://www.metro.net/news/simple_pr/metro-retires-last-diesel-bus/).
41. Calculated based on total 2020 volumes of renewable natural gas delivered to utility owned natural gas vehicle fueling stations and G-NGV tariff customers; see also LCFS Pathway Certified Carbon Intensities, California Air Resources Board (CARB), available at: <https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities>.
42. See SoCalGas and University of California Irvine Demonstrate Power-to-Gas Technology Can Dramatically Increase the Use of Renewable Energy, PR Newswire (March 30, 2017), available at: <https://www.prnewswire.com/news-releases/socalgas-and-university-of-california-irvine-demonstrate-power-to-gas-technology-can-dramatically-increase-the-use-of-renewable-energy-300432101.html>.
43. Total term savings from program years 2016 to 2020. See Southern California Gas Company Advanced Meter Semi annual Report, (2017), available at: SoCalGas\_Advanced\_Meter\_Semi\_Annual\_Report\_August\_2017.pdf.
44. SoCalGas participated in a 2015 study by Washington State University researchers as part of the Environmental Defense Fund's natural gas value chain analysis on methane emissions from distribution systems across the country. The study found utilities in the western United States contributed the least amount of emissions to the nation's inventory (~17%). See key results from the study, available at: <https://methane.wsu.edu/key-results/>.
45. See Chapter 14 of SoCalGas' 2020 SB 1371 Compliance Plan, available at: [https://www.socalgas.com/2020\\_Final\\_SCG\\_SBI371\\_Compliance\\_Plan.pdf](https://www.socalgas.com/2020_Final_SCG_SBI371_Compliance_Plan.pdf).
46. See 2020 UAI Excellence Award Winners, Utility Analytics Institute, available at: <https://utilityanalytics.com/2020-award-winners/>.
47. GHG savings did not include the LA Metro fleet conversion project, UCI power-to-gas project, or the Utility Analytics Institute Awarded project.
48. Equivalency metric derived using the U.S. Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator (last updated March 2020), available at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.

This document contains statements that constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on assumptions with respect to the future, involve risks and uncertainties, and are not guarantees. Future results may differ materially from those expressed in any forward-looking statements. These forward-looking statements represent our estimates and assumptions only as of March 23, 2021. We assume no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors.

In this document, forward-looking statements can be identified by words such as "believes," "expects," "anticipates," "plans," "estimates," "projects," "forecasts," "should," "could," "would," "will," "confident," "may," "can," "potential," "possible," "proposed," "in process," "under construction," "in development," "target," "outlook," "maintain," "continue," or similar expressions, or when we discuss our guidance, priorities, strategy, goals, vision, mission, opportunities, projections, intentions or expectations.

Factors, among others, that could cause actual results and events to differ materially from those described in any forward-looking statements include risks and uncertainties relating to: decisions, investigations, regulations, issuances or revocations of permits and other authorizations, renewals of franchises, and other actions by (i) the California Public Utilities Commission (CPUC), U.S. Department of Energy, and other regulatory and governmental bodies and (ii) states, counties, cities and other jurisdictions in the U.S.; the success of business development efforts and construction projects, including risks in (i) completing construction projects or other transactions on schedule and budget, (ii) the ability to realize anticipated benefits from any of these efforts if completed, and (iii) obtaining the consent of partners or other third parties; the resolution of civil and criminal litigation, regulatory inquiries, investigations and proceedings, and arbitrations, including, among others, those related to the natural gas leak at the Aliso Canyon natural gas storage facility; the impact of the COVID-19 pandemic on our capital projects, regulatory approval processes, supply chain, liquidity and execution of operations; actions by credit rating agencies to downgrade our credit ratings or to place those ratings on negative outlook and our ability to borrow on favorable terms and meet our substantial debt service obligations; moves to reduce or eliminate reliance on natural gas and the impact of volatility of oil prices on our businesses and development projects; weather, natural disasters, pandemics, accidents, equipment failures, explosions, acts of terrorism, computer system outages and other events that disrupt our operations, damage our facilities and systems, cause the release of harmful materials, cause fires and subject us to liability for property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), may be disputed by insurers or may otherwise not be recoverable through regulatory mechanisms or may impact our ability to obtain satisfactory levels of affordable insurance; the availability of natural gas and natural gas storage capacity, including disruptions caused by limitations on the withdrawal of natural gas from storage facilities and equipment failures; cybersecurity threats to the storage and pipeline infrastructure, the information and systems used to operate our businesses, and the confidentiality of our proprietary information and the personal information of our customers and employees; volatility in interest and inflation rates and commodity prices and our ability to effectively hedge these risks; changes in tax policies, laws and regulations; and other uncertainties, some of which may be difficult to predict and are beyond our control.

These risks and uncertainties are further discussed in the reports that the company has filed with the U.S. Securities and Exchange Commission (SEC). These reports are available through the EDGAR system free-of-charge on the SEC's website, [www.sec.gov](http://www.sec.gov). Investors should not rely unduly on any forward-looking statements.

Sempra North American Infrastructure, Sempra LNG, Sempra Mexico, Sempra Texas Utilities, Oncor and Infraestructura Energética Nova, S.A.B. de C.V. (IEnova) are not the same companies as the California utilities, San Diego Gas & Electric Company (SDG&E) or Southern California Gas Company (SoCalGas), and Sempra North American Infrastructure, Sempra LNG, Sempra Mexico, Sempra Texas Utilities, Oncor and IEnova are not regulated by the CPUC.

Release Date: March 23, 2021

© 2021 Southern California Gas Company. All copyright and trademark rights reserved.