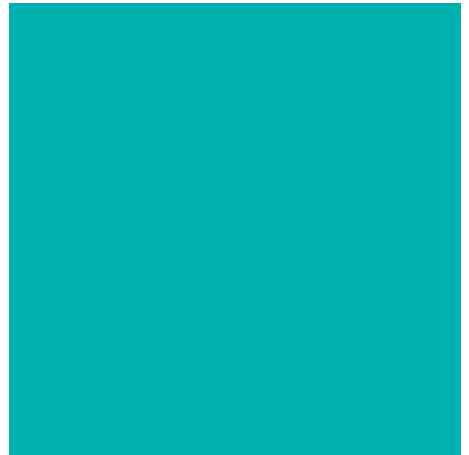


# BUILDING A BETTER FUTURE



## SUSTAINABILITY STRATEGY UPDATE



OCTOBER 2021

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# Executive Message

We have no time to waste.

That's how we feel about the urgency to transform the way we deliver energy to you, to help tackle humanity's greatest challenge – climate change – and to help shape a sustainable and equitable future for all. Having lived through another year defined by extreme weather, our resolve to help improve lives and protect communities with climate-resilient infrastructure is stronger than ever.

As daunting as climate change is, it has also been a powerful and long-standing source of inspiration for our employees to continuously innovate and collaborate. Our climate resilience journey began nearly 20 years ago with a singular determination to build a world-class wildfire mitigation program from the ground up. Today, SDG&E® is widely seen as an industry leader in wildfire safety, and we're also recognized as a pioneer in adopting digital innovations – such as fiber optic sensors, artificial intelligence and 5G-ready communications – to advance safety and reliability. We're looking to build on that history of leadership and innovation to fight the climate crisis.

In the following pages, you will learn about the progress we've made alongside our partners since the publication of our sustainability strategy in October 2020. Over the past year, we ramped up our investments in advanced technologies – green hydrogen, energy storage and microgrids – designed to strengthen grid reliability. At the same time, we expanded our efforts around environmental stewardship and doubled our charitable giving to help sustain residents hard hit by the ongoing pandemic.

As our workforce continues to provide essential services to our customers, we're also finding ways to push ourselves to do more, such as enhancing our climate goal of net zero greenhouse gas (GHG) emissions by 2045 and shortening our timelines to achieve goals for a zero-emission fleet and sustainable facilities.

Just as it takes a village to raise a child, it takes all of us to combat climate change. For that reason, we're thankful for the broad base of public, private, nonprofit and academic leaders and organizations working alongside us to advance sustainability. Multi-stakeholder, cross-sector collaboration is the key to unlocking innovations.

While we're proud of what we've done to date, it's just the beginning of a long journey. Together with our employees, customers, suppliers, innovators, investors, partners and community organizations, we can and will make a difference. We strive to build a better, more inclusive economy. Just as our region has established itself as a global leader in biotechnology, climate research and communication technologies, our region aspires to catapult to the forefront of climate adaptation and resiliency.

With our shared climate goals as our North Star, it's full speed ahead.



**Caroline Winn**  
SDG&E Chief Executive Officer



**Estela de Llanos**  
SDG&E Vice President,  
Energy Procurement and Sustainability



**Caroline Winn**  
SDG&E Chief Executive Officer



**Estela de Llanos**  
SDG&E Vice President,  
Energy Procurement  
and Sustainability



# Highlights

## Investments for a Brighter Future

**\$750M**

inaugural green bonds issued in 2021

**\$872M**

in contracts with diverse suppliers in 2020

**\$30M**

dedicated to further San Diego's climate action and climate equity goals

**\$9.8M**

in charitable donations<sup>1</sup> in 2020 benefiting 551 nonprofits

## Wildfire Mitigation and Climate Resilience

**4,091**

miles of power lines hardened against wildfires to date

**37,000+**

power poles in High-Fire Threat District inspected by drones to date

**4**

microgrids in development

**11**

wildfire safety/resilience fairs and webinars held in 2021

**~3,000**

renewable portable backup batteries provided to the most vulnerable residents in high-fire risk areas

## Clean Transportation

**3,260**

chargers built to date

**IN DEVELOPMENT**

**304**

chargers at schools, parks and beaches

**~2,000**

chargers for workplaces and multi-unit dwellings

**300**

chargers to support 3,000 medium/heavy-duty vehicles

1. These are shareholder-funded, not recovered from customers.



## Utility-Owned Energy Storage

**3**

1 storage facility added in 2021 and 2 under construction

**3**

mobile storage batteries acquired in 2021

**6**

different types of energy storage technologies

**~145 MW**

of utility-owned storage expected by the end of 2022

## Environment

**9,500+**

trees planted

**~15,000**

pounds of e-waste diverted

**~3,000**

solar panels (12,000 pounds) recycled

**3,000+**

pounds of upcycled appliances, electronics and office supplies donated

**10,000**

pounds of metal materials recycled

## Stakeholder Engagement

**~3,500**

customers, employees, partners, community leaders and critics engaged

**21**

languages to which SDG&E translated wildfire safety communications

## Clean Energy

**~27,600**

rooftop solar systems (with capacity totaling 190 MW) interconnected to the grid in 2020

## White House National Climate Advisor Lauds SDG&E's Wildfire Safety and Climate Resilience Advancements

In August 2021, White House National Climate Advisor Gina McCarthy visited SDG&E's Emergency Operations Center to learn about our pioneering work to reduce wildfire risk, strengthen climate resilience and protect public safety. She was joined by U.S. Representatives Scott Peters and Mike Levin for a demonstration of the high-tech tools we use to gain situational awareness, including artificial intelligence-based fire weather forecast models.



Left to right: SDG&E CEO Caroline Winn, White House National Climate Advisor Gina McCarthy, Congressman Mike Levin, Congressman Scott Peters and Sempra® Group President Kevin Sagara



*They [SDG&E] have been working on this issue for 10 years...They are using all kinds of different technologies to both manage the fires once they're detected, but even more importantly to detect them early on. Look, these are all adaptations to our climate crisis that everyone should take a look at and start emulating.*

**- National Climate Advisor  
Gina McCarthy**





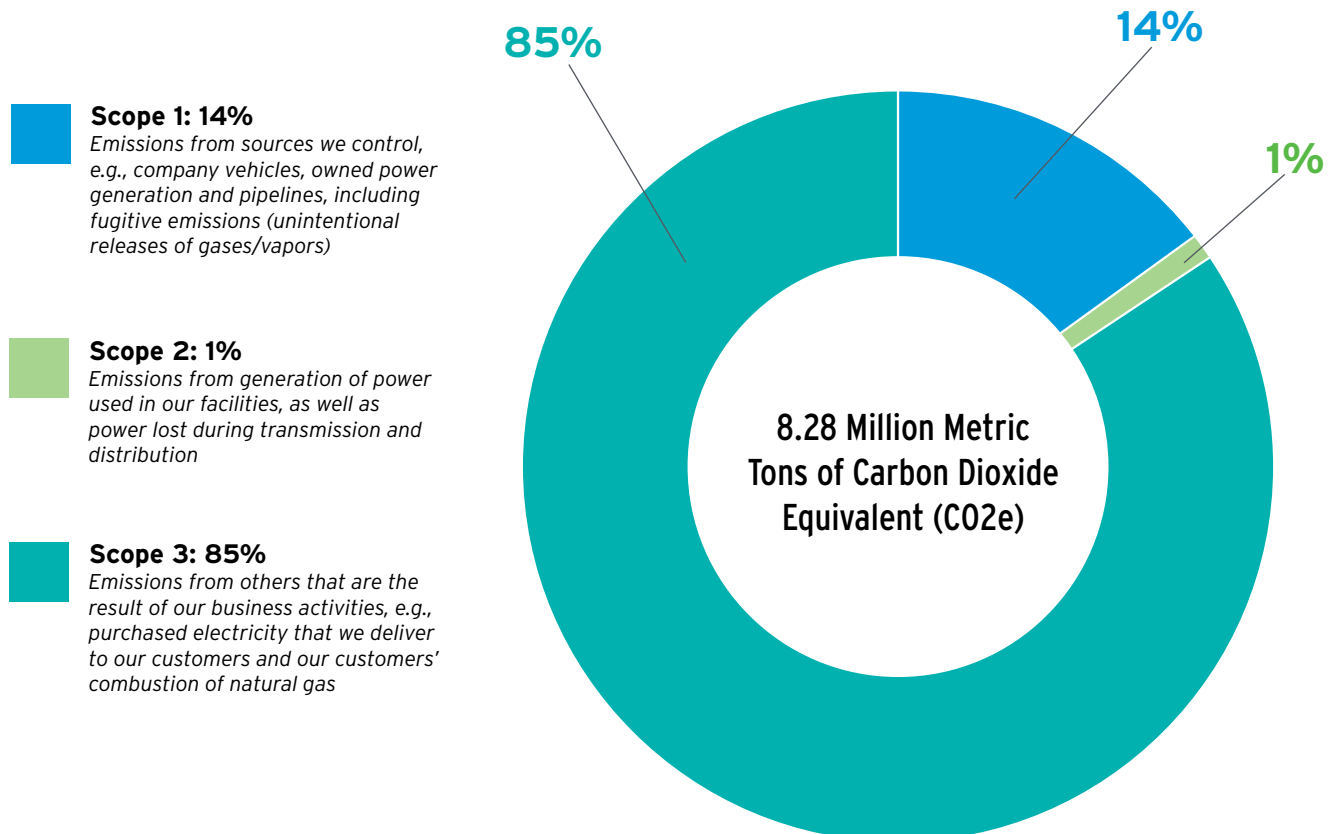
# Our Commitment

## Net Zero by 2045

In March 2021, we solidified our sustainability commitment with our goal to reach net zero GHG emissions by 2045. What that means is that we aim to remove as many GHG emissions from the atmosphere as we produce. Our commitment goes beyond reducing our own emissions and includes tackling those generated by our customers' energy use. In order to track progress, we are undertaking a rigorous, multi-year effort to build a comprehensive, verified GHG inventory. A complete baseline will provide us with insights on where we stand now and help shape our path forward.

*A holistic approach and understanding of economy-wide interdependencies will continue to inform our actions. SDG&E is undertaking an economy-wide GHG study supported by some of the leading third-party experts to inform our options for achieving net zero emissions by 2045 and to develop a decarbonization roadmap that maintains resiliency and reliability. We look forward to sharing the results and gathering feedback in 2022.*

## 2019 SDG&E Greenhouse Gas Emissions Profile



Scopes 1 and 2 emissions are third-party verified

## Advancing Climate Equity

As we pursue our net zero goal, top of mind for us is climate equity – providing all of our customers equitable access to clean energy, and climate resilience tools and technologies. We value strategies that do not create disparate impacts or produce unintended social consequences. To that end, we are exploring the use of data and digital technologies with stakeholders inside and outside our organization. These technologies will help us measure, track and report how we serve vulnerable communities and to better understand which portions of our service territory are most impacted by GHG emissions. Additionally, this effort will help guide and prioritize our investments and decisions on energy infrastructure, outreach and communication to advance climate equity.



*Climate change affects all of us, but the most vulnerable communities – those that are already struggling with health, income and educational disparities – are hit the hardest. As we work to shape the clean energy future, we need to understand the full impact of our actions, look at things from an equity lens and make sure we leave no one behind.*

**- Estela de Llanos, SDG&E Vice President of Energy Procurement and Sustainability**



*SDG&E employees volunteered with a local nonprofit to install rooftop solar for homeowners in underserved communities.*

### The San Diego Climate Equity Fund

Under new franchise agreements finalized in June 2021 between SDG&E and the City of San Diego, we will contribute \$30 million (shareholder-funded) for initiatives that focus on infrastructure improvements and solar adoption in underserved communities. The city's General Fund will receive \$20 million to further its climate action and climate equity goals. The remaining \$10 million will fund solar energy rebates in historically underserved neighborhoods.





# Our Sustainability Goals

Since releasing our sustainability goals in October 2020, we have continued to refine them and to challenge ourselves to accelerate progress wherever possible. With climate conditions worsening, SDG&E recognizes the urgency to act and do more. Over the past year, we have set new and more aggressive timelines, as we aim to achieve some of our goals related to our fleet, facilities and advanced technology. In addition to our own sustainability goals, we are also guided by those set by Sempra, our parent company.

Do the Right Thing	Champion People	Shape the Future
Environmental Stewardship	"Outside In" Community Outreach	Reimagine Transportation
<p><b>Each year:</b></p> <ul style="list-style-type: none"><li>Plant at least 10,000 trees (starting in 2021) supporting local biodiversity with the "Right Tree, Right Place" program, and intelligent water use</li></ul> <p><b>By 2030:</b></p> <ul style="list-style-type: none"><li>Divert 100% of our organic green waste from entering landfills, especially green waste related to vegetation management</li><li>Increase recycled water use to at least 90% at all our facilities</li></ul>	<p><b>Each year:</b></p> <ul style="list-style-type: none"><li>Actively engage a growing network of external, community-based, nonprofit stakeholders who provide continuous constructive feedback and partner with us on meeting the needs of diverse and underserved communities through sustainability initiatives</li></ul>	<p><b>Starting in 2020:</b></p> <p>Support California’s goal to transition to Zero-Emission Vehicles by accelerating our strategic collaboration of key stakeholders to deliver an ambitious region-wide clean transportation infrastructure goal, address air pollution and solidify the region's leadership on the global transportation map. We will continue to shape constructive policies and legislation to help ensure customer adoption and facilitate an equitable transition.</p>
Sustainable Operations	Creating Opportunities through Diversity, Equity & Inclusion	Grid Modernization & Breakthrough Solutions
<p><b>By 2030:</b></p> <ul style="list-style-type: none"><li>Electrify 100% of our Light-Duty Fleet</li><li>Transition 30% of our overall fleet to Zero-Emission Vehicles (ZEV)<sup>1</sup></li><li><b>Divert 100% of facilities-related waste from landfills</b></li><li><b>Reduce facilities freshwater use by 50% (2010 baseline)</b></li><li><b>Achieve zero net energy<sup>2</sup> for all owned facilities (current usage ~5.5 MW)</b></li><li><b>Enable green miles via on-site charging with ~2,000 EV charge points</b></li><li><b>Earn U.S. Green Building Council Leadership in Energy and Environmental Design (USGBC LEED®) (Silver+) certifications for all new construction</b></li></ul> <p><b>By 2035:</b></p> <ul style="list-style-type: none"><li><b>Operate 100% ZEV fleet</b></li></ul> <p><b>By 2040:</b></p> <ul style="list-style-type: none"><li>Deploy 100% non-SF6 equipment everywhere feasible</li></ul>	<p><b>Starting in 2020:</b></p> <ul style="list-style-type: none"><li>We are advancing our commitment to engage, act, measure and report our performance related to diversity, equity and inclusion with greater transparency and urgency. Emphasizing five key pillars to track progress:</li></ul> <ol style="list-style-type: none"><li>Leading from the top</li><li>Accelerating employee engagement</li><li>Creating opportunity</li><li>Driving conscious inclusion</li><li>Partnering with the communities we serve</li></ol> <p><b>Sustainable Supply Chain</b></p> <p><b>By 2025:</b></p> <ul style="list-style-type: none"><li>Develop an energy industry supply chain sustainability program</li></ul>	<p><b>By 2022:</b></p> <ul style="list-style-type: none"><li>Place two green hydrogen projects into service to offer long-duration energy storage, increase system resiliency and reduce carbon intensity</li><li><b>Plan and pilot a Virtual Power Plant to further expand and leverage distribution-level demand response as a means to reduce GHG emissions, advance resource adequacy and enhance grid resiliency</b></li></ul> <p><b>By 2030:</b></p> <ul style="list-style-type: none"><li>Collaborate with industry leaders and implement at least one breakthrough solution that mitigates direct emissions from gas-fired generation</li></ul>
<p>1. Zero-Emission Vehicle (ZEV) includes full battery electric vehicles (BEV), plug-in hybrid vehicles (PHEV) and hydrogen fuel cell vehicles. Fleet goals contingent on vehicle availability and California Public Utilities Commission (CPUC) funding.</p> <p>2. CPUC definition of <a href="#">Zero Net Energy</a></p> <div><div></div>New goals</div> <div><div></div>To be completed 5 years ahead of previous timeline</div> <div><div></div>To be completed 3 years ahead of previous timeline</div>		

## Sempra Sustainability Goals<sup>1</sup>

Do the Right Thing		Champion People	Shape the Future
Achieving World-Class Safety	Driving Resilient Operations	Championing People	Enabling the Energy Transition
For our customers, employees, contractors and the communities we serve	To achieve consistent excellence in all we do	To create an inspired workforce	To provide affordable, lower-carbon energy in every market we serve
<b>Each year, we aim to:</b> <ul style="list-style-type: none"> <li>Achieve zero employee and contractor fatalities</li> <li>Improve employee and contractor OSHA recordable injury rates and lost work-time incident rates</li> <li>Participate in emergency planning processes in 100% of the communities we serve</li> <li>Train 100% of critical employees in emergency management and response</li> </ul>	<b>Each year, we aim to:</b> <ul style="list-style-type: none"> <li>Achieve electric reliability in top quartile</li> <li>Work to identify and include new goals under Driving Resilient Operations in future reports</li> </ul>	<b>Each year, we aim to:</b> <ul style="list-style-type: none"> <li>Achieve a voluntary employee turnover rate of 5% or less</li> <li>Achieve a company-wide employee engagement survey score in the top quartile</li> <li>Provide 30+ training hours per employee</li> <li>Achieve or maintain workforce diversity consistent with that of the communities where we operate</li> </ul>	<b>Each year, we aim to:</b> <ul style="list-style-type: none"> <li>Enroll 90% of eligible customers in alternative rates for energy programs (SDG&amp;E and SoCalGas®)</li> </ul> <b>By 2030, we aim to:</b> <ul style="list-style-type: none"> <li>Reduce fugitive emissions from our natural gas transmission and distribution systems 40% from our 2015 baseline<sup>2</sup></li> <li>Eliminate 100% of natural gas vented during planned transmission pipeline work (SDG&amp;E and SoCalGas, excludes emergency repairs)</li> </ul> <b>By 2045, we aim to:</b> <ul style="list-style-type: none"> <li>Deliver 100% renewable or zero-carbon energy to electric utility customers (SDG&amp;E)</li> </ul> <b>By 2050, we aim for:</b> <ul style="list-style-type: none"> <li>Net-zero GHG emissions across scopes 1, 2 and 3<sup>3</sup></li> </ul>

1. This chart shows goals released by Sempra in the 2020 Corporate Sustainability Report (CSR) and adopted by SDG&E. For more on Sempra Sustainability, please visit [www.sempra.com/sustainability](http://www.sempra.com/sustainability).

2. SDG&E, SoCalGas and iEnova efforts contribute to this shared fugitive emissions reduction goal.

3. SDG&E's climate commitment is to reach net zero emissions by 2045.

## Backing Up Our Commitment with \$750M in Inaugural Green Bonds

In August 2021, we issued \$750 million in green bonds, raising some of the capital needed to work toward the climate adaptation and resilience projects outlined in our sustainability strategy. This is our inaugural green bond issuance and demonstrates how our capital-raising activities are also founded on well-accepted sustainability principles.

Details of SDG&E's bond issuance pursuant to Sempra's sustainable financing framework can be found at [sempra.com/sustainability/sustainable-financing](http://sempra.com/sustainability/sustainable-financing).



# Framework for Getting To Net Zero

There is wide recognition that a broad suite of solutions, including electrification, clean fuels and carbon removal, will be needed to achieve net zero GHG emissions. Innovative technology, constructive policies, customer adoption of energy-efficient initiatives and multi-stakeholder collaboration across many sectors are all necessary to drive progress. Our framework for the energy transition is centered on decarbonization, diversification and digitalization, which is aligned with Sempra's long-term strategy to achieve net zero.



## DECARBONIZATION

Reduce the carbon content of energy used in key sectors, including transportation, power generation and industrial operations.

## DIVERSIFICATION

Develop lower to zero-carbon fuel choices and expand distributed networks and storage to improve resiliency and reliability.



SOLAR



WIND



NATURAL GAS



HYDROGEN



RENEWABLE NATURAL GAS



ELECTRIC VEHICLES



ENERGY STORAGE



## DIGITALIZATION

Leverage digital technologies to improve operational efficiency, safety and customer service.



# Shape the Future

Recognizing that existing technologies are insufficient to meet climate goals, we are piloting and evaluating emerging innovations. They include hydrogen-based, long-duration energy storage, 100% renewable energy microgrids and vehicle grid integration that enables electric vehicles to send electricity to meet high demand.



*Around half of emissions reductions that are needed still require major innovation of clean technologies.*

*- International Energy Agency*



*In 2020, SDG&E developed an award-winning intelligent image processing project, which uses Artificial Intelligence and machine learning to rapidly identify electrical infrastructure damage in near real time by analyzing millions of drone images. In the past, it would have taken 10 linemen to manually review 2,000 images per day. Now, 27,000 images can be analyzed per day. Repairs are made more quickly, increasing public and employee safety.*



## Grid Modernization & Breakthroughs

SDG&E is at the forefront of adopting and pioneering clean energy and climate resilience solutions that drive tangible progress toward a net zero future. Our focus remains on building a diverse portfolio of innovative solutions that transform the grid into a catalyst for clean energy.

### Energy Storage

Energy storage will continue to play a key role in integrating intermittent renewable energy as California moves closer toward its 100% carbon-free electricity goal. Over the past decade, SDG&E has integrated a growing and diverse portfolio of energy storage assets to support grid reliability and operational flexibility, as well as to maximize the use of the abundant solar energy available in California. Last summer, our grid operators leveraged our storage capacity to help mitigate rotating outages. In the coming years, our focus will be long-duration energy storage, which could enable us to align demand with supply not just across hours, but across days and seasons.



### Diverse Energy Storage Portfolio



Vanadium redox flow  
battery (Bonita)



Lithium iron phosphate  
energy storage  
(Kearny Mesa)



Lithium nickel manganese  
cobalt energy storage  
(Miramar)

### Top Gun Energy Storage

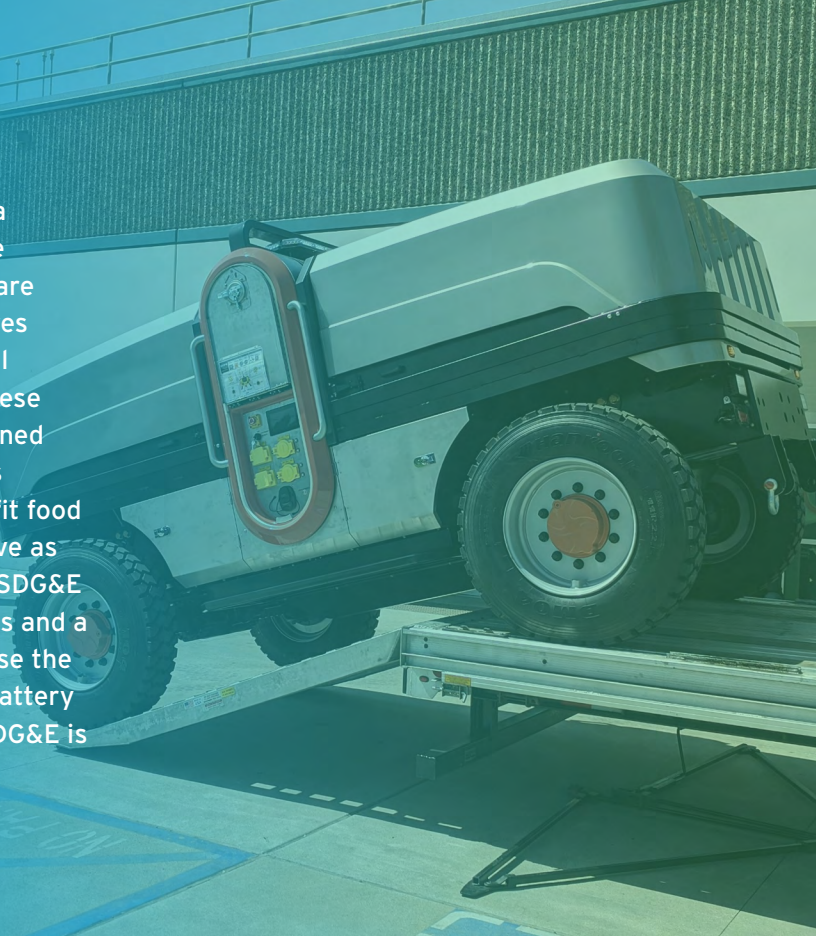
The Top Gun Energy Storage Facility located in the Miramar area of San Diego is the newest addition to SDG&E's owned energy storage portfolio. This 30 MW lithium-ion facility was commissioned in summer 2021 and can provide backup energy to about 20,000 residential customers for four hours. The facility is named to honor the famed Top Gun Navy Fighter Weapons School previously based at the Marine Corps Air Station Miramar.





## Cutting-Edge Mobile Batteries for Backup Power

SDG&E has acquired three mobile batteries, including a 329 kW battery and a 15 kW battery, to help reduce the impact of Public Safety Power Shutoffs (PSPS), which are used as a measure of last resort to help prevent wildfires during very windy and dry conditions. Unlike traditional backup generators that run on diesel or natural gas, these batteries are zero emission. The 15 kW battery is designed as a four-wheel drive vehicle. In an initial use case, this battery will be deployed as backup power for a nonprofit food distribution center during PSPS events. It can also serve as backup power at Community Resource Centers, which SDG&E staffs during extended outages to provide water, snacks and a place to charge devices. Impacted residents can also use the battery to charge their electric vehicles. The 329 kW battery will be initially deployed to Cameron Corners, where SDG&E is building a permanent, fully renewable microgrid.



## Long-Duration Green Hydrogen Energy Storage at Borrego Springs

In the remote desert town of Borrego Springs in east San Diego County, SDG&E is working to turn excess solar electricity into hydrogen, which can be stored as energy for eight or more hours. An electrolyzer will produce hydrogen when solar energy is abundant on the local circuit, and a fuel cell will convert the hydrogen into electricity when needed by the customers. The hydrogen will be integrated with the existing Borrego Springs Microgrid to help strengthen electric service reliability and community resiliency.





## Wildfire Mitigation & Hardening

Wildfire mitigation is a top priority at SDG&E. Although we are recognized as an industry leader, our fire science and wildfire mitigation teams continue to innovate and improve to help keep our communities safe. We are now on version 4.0 of our Fire Safe program and always looking for innovative new ways to build greater resiliency.



*SDG&E crews replaced more than 2,300 wood poles with fire-resistant steel poles in the Cleveland National Forest.*

### Cleveland National Forest Fire Hardening and Safety Project

Nearly a decade ago, SDG&E developed a plan to upgrade our electric infrastructure in and around the Cleveland National Forest to reduce fire risk. One of our first fire hardening programs, the Cleveland National Forest project, was completed in July 2021. Throughout the project, we worked closely with the U.S. Forest Service and Native American Tribal nations to mitigate impact. This project includes:

- Replacing 2,341 wood poles with new fire-resistant steel poles
- Installing 17 miles of new underground distribution cable and equipment
- Building 112 miles of transmission lines and 60 miles of overhead distribution lines and equipment
- Decommissioning 15 miles of old access roads on U.S. Forest Service land

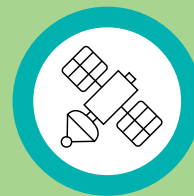
## Fire Safe 4.0



**Weather + camera network**



**Artificial Intelligence**



**Satellite alerts**



**Risk-based decision tools**



**Strategic hardening**



**Community programs**



**Vegetation management**

## Microgrids

Microgrids are small grids that can operate in parallel with or independently of the larger electric grid to keep pre-defined areas powered during emergencies. They are an important tool to increase community resiliency, especially in regions that are subject to Public Safety Power Shutoffs. A pioneer in developing microgrid technology, SDG&E built America's first utility-scale microgrid in Borrego Springs in 2013 and is currently upgrading it with the intent that it run on 100% renewable energy. As we add four more microgrids to help lessen the impact of Public Safety Power Shutoffs and keep critical facilities powered, we are leveraging the lessons learned from the Borrego Springs Microgrid.

### Cameron Corners Microgrid

Cameron Corners is a remote, vulnerable community located in a High-Fire Threat District in eastern San Diego County. To minimize the impact of Public Safety Power Shutoffs on this community, we are building a microgrid to help keep critical facilities, like a CAL FIRE station and a central telecommunications switching station, powered during extended outages and emergencies.

Key features of the project include:

- An 875 kW solar array to generate renewable electricity
- An ~2,400 kWh iron flow battery – a cutting-edge energy storage system that uses iron, salt and water as electrolytes, making it non-hazardous, non-flammable and fully recyclable
- An advanced microgrid controller to integrate all the distributed energy resources

These resources will provide additional benefits during normal grid operations by generating solar power and dispatching that energy via battery storage when it is needed by the California Independent System Operator (CAISO) to support grid stability and reliability.



*Solar array at the Cameron Corners microgrid.*



### Supporting Critical Community Resources

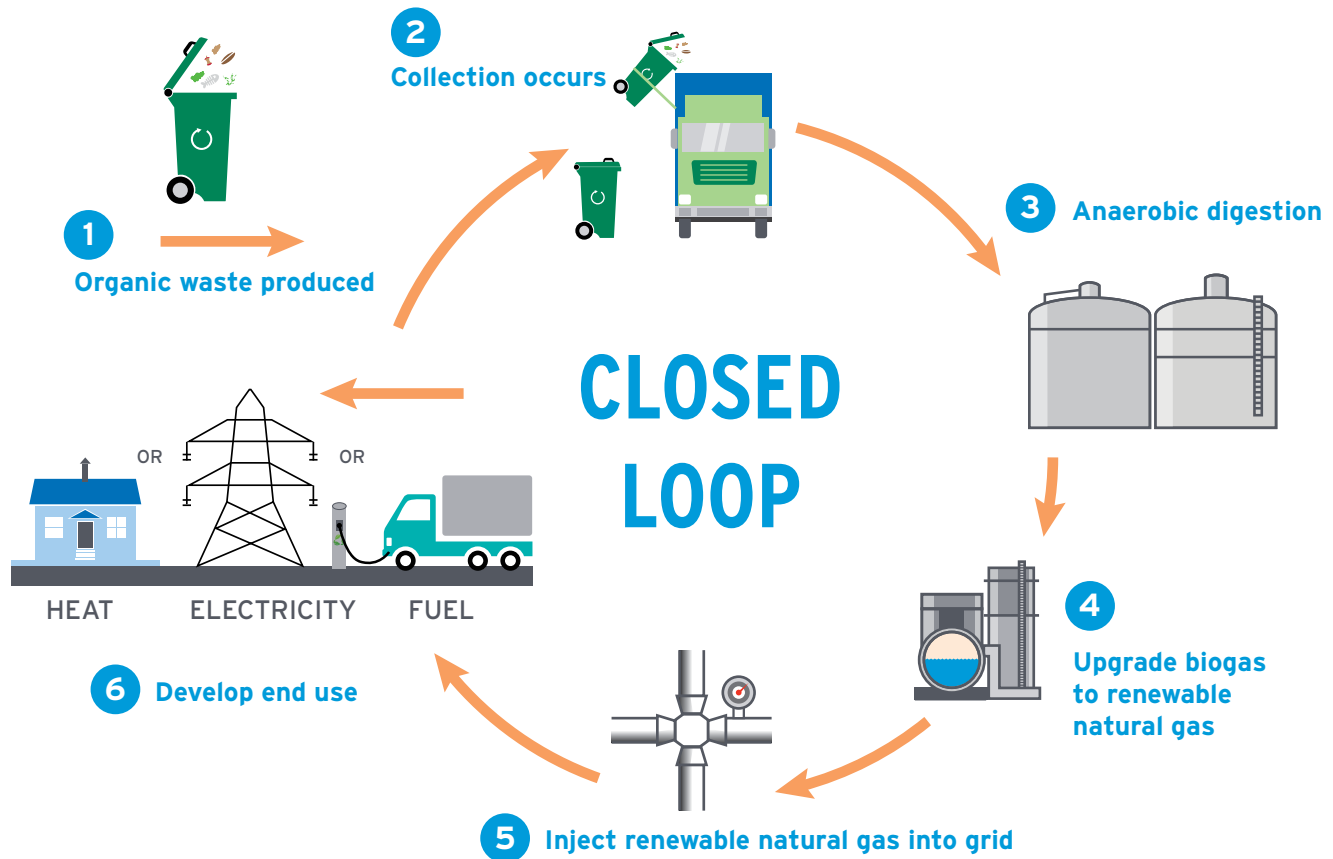
- Medical care facilities
- CAL FIRE station
- Telecom central office (switching station)
- Local food establishments
- Convenience stores
- Gas and propane stations





## Renewable Natural Gas

As California looks to achieve carbon neutrality and reduce air pollution, the benefits of renewable natural gas (RNG) should not be ignored. Storable and easily transportable, RNG is derived from food waste, landfills, agriculture and other sources that release carbon emissions into the atmosphere. The leading use for RNG today is in the transportation sector, where 80% of the natural gas vehicles in California are fueled with RNG. SDG&E is exploring new ways to reduce the carbon intensity of our gas system by leveraging RNG.



## ACCELERATED Virtual Power Plant

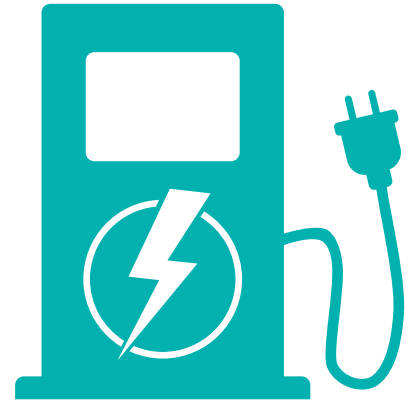
We have accelerated our timeline for delivering a Virtual Power Plant (VPP) from 2025 to 2022 to help boost grid reliability, flexibility and resiliency in a remote community. Planned for Shelter Valley in eastern San Diego County, where SDG&E is already developing a renewable energy-powered microgrid, this small-scale project will integrate customer-owned distributed energy resources, such as rooftop solar and energy storage, with a microgrid controller. During periods when electricity supplies are tight, this VPP can help by putting electricity on the grid. Lessons learned from the project will inform our thinking on how to safely and cost-effectively integrate customer-owned resources to meet future energy needs.



SDG&E engineer Stephanie Lomeli (left) and Team Lead Chequala Fuller (right) next to a large-scale mobile battery, which is being evaluated for different uses and sites.

## Reimagine Transportation

Transportation is the backbone of the U.S. economy. However, it's also the largest contributor of GHG emissions in California and our region, in addition to being a major source of air pollution. Over the past decade, SDG&E has developed a robust portfolio of electric vehicle (EV) charging infrastructure programs to support the electrification of a full spectrum of vehicles and equipment – light, medium and heavy-duty, including trucks, school buses, transit buses and forklifts. To date, we have built about 3,260 chargers. In the coming years, we expect to build thousands more in our region to help meet California's ambitious clean transportation goals.





## Accelerate to Zero Emissions

This year, SDG&E joined forces with key regional stakeholders to create the Accelerate to Zero Emissions (A2Z) collaborative dedicated to curbing air pollution and climate change through clean transportation. In July, a diverse group of local leaders announced the launch of A2Z and released the findings of a gap analysis; it identified barriers to widespread adoption of zero-emission vehicles (ZEV), particularly in underserved communities. The report also quantified for the first time how many EV chargers and hydrogen fueling stations are needed for the region to meet its share of California's clean transportation goal:

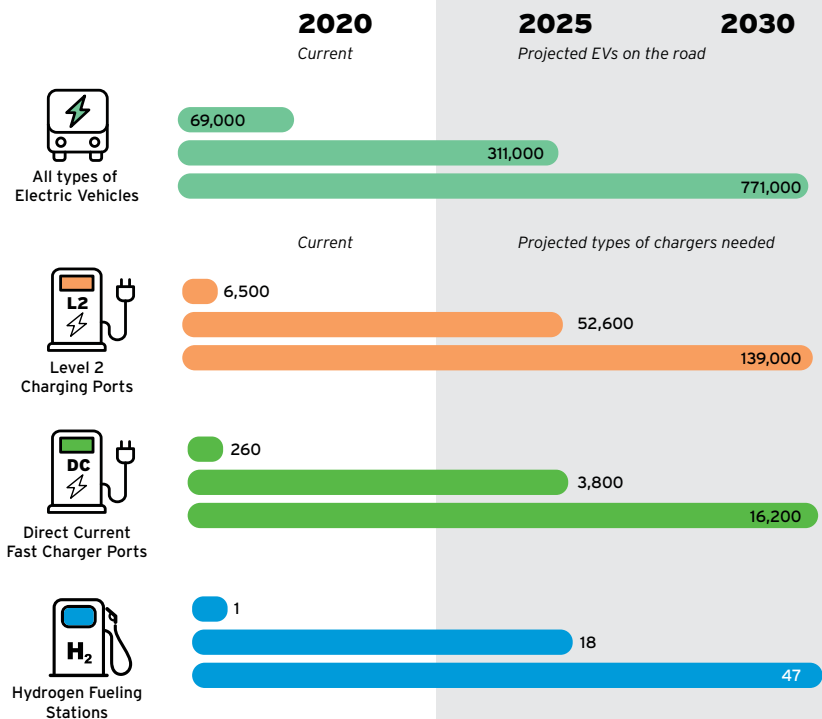
**8 million ZEVs on the road by 2030.**



**The A2Z collaborative consists of 13 public, private and nonprofit organizations focused on:**

- Attracting public and private investment and maximizing effectiveness of regional charger deployments
- Developing programs that enable locals to purchase EVs and install chargers
- Encouraging equitable access to EVs and charging infrastructure for all San Diegans
- Developing and implementing a Regional EV and Transportation Electrification Strategy

## EV Infrastructure for San Diego Region



*We can't combat the climate crisis alone – it's collaborative partnerships like this that will help us reach our city's climate action goals faster and deliver crucial air quality improvements for our communities. This important commitment to transforming our transportation sector will create good local jobs and protect our quality of life for the next generation and beyond.*

**- Todd Gloria, San Diego Mayor**

## Vehicle-to-Grid Pilot Project

This year, we launched our five-year vehicle-to-grid (V2G) pilot project with the Cajon Valley Union School District that will test the flow of electricity from six electric school buses to the grid and vice versa. In September, crews finished construction of several 60 kW bi-directional DC fast chargers. The batteries onboard the buses will soak up energy during downtime and when clean energy is abundant on the grid (such as midday when solar energy production is at its peak) and discharge energy to the grid during peak hours in the afternoon and evening. The goal is to help ease strain on the grid, reduce energy costs for the school district and explore a new technology to support the pathway to net zero. Lessons learned from this project can pave the way for similar deployments with trucks in the future.



Electric school buses at the Cajon Valley School District are part of the vehicle-to-grid pilot project.



In March 2021, we energized the first charger installation under our Power Your Drive for Fleets program. The new charging equipment powers electric passenger vans at Outdoor Outreach, a nonprofit that works to reach youth from San Diego's most vulnerable communities and eliminates barriers to accessing outdoor spaces in southern California.



“

*It's not just about the people in the vehicles benefiting from electrification, it's about the whole community benefiting from clean air as a byproduct of electrification of transportation.*

**- Jeni Reynolds,  
SDG&E Director of  
Clean Transportation**





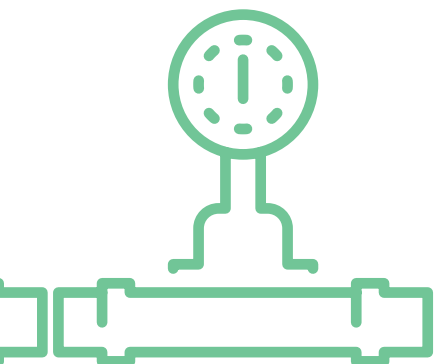
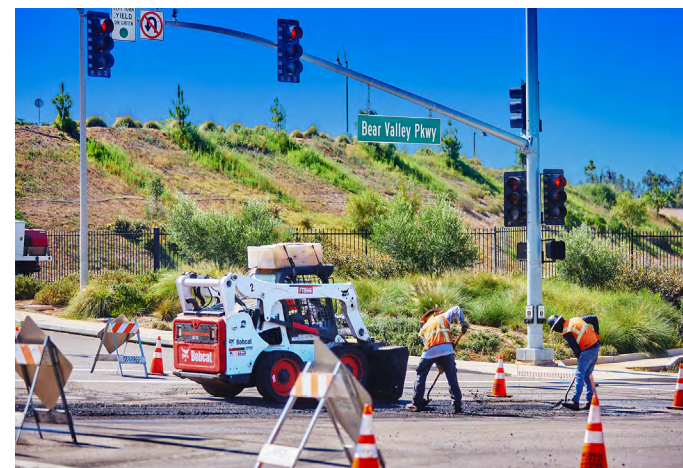
## Digital & Cloud Innovations

Under our Digital Energy initiative, we are leveraging the latest high-tech advancements, including artificial intelligence, machine learning, virtual reality and big data analytics to improve safety, reliability and efficiency. Project teams throughout our company are undertaking projects that we could have never imagined before. For example, we are building a private, 5G-ready LTE communications network to enable widespread rollout of our patented Falling Conductor Protection System. This system can help prevent wildfires by cutting off power to a broken power line at an average of 1.37 seconds, before it even hits the ground. Sixteen different use cases are being evaluated for the LTE network, including electric vehicle charging stations, Fault Location Isolation and Service Restoration (FLISR), wireless fault indicators and other grid-sensing technology.



## Line 1600 Fiber Optic Sensing

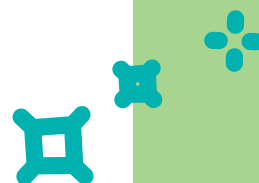
As part of our project to upgrade a major gas transmission line called Line 1600, crews are installing approximately 43 miles of new modern pipe and adding a fiber optic sensing cable in the pipeline trench. This new sensing capability will help us address one of the biggest threats to pipelines: dig-ins by third-party excavators. The sensing technology enables us to monitor and locate vibrations near the pipe to protect against dig-ins, temperature changes that could indicate a leak and ground movement that could impact the integrity of the pipeline. Enhanced analytics from fiber optics will help us respond more quickly to issues and prevent natural gas from escaping into the atmosphere to protect public safety, enhance system reliability and reduce methane emissions.





# Do the Right Thing

We hold ourselves to high standards – not just in serving our customers, but also in how we impact the economy, environment and society. We think it's particularly important that we lead by example and minimize the environmental footprint of our facilities. While proud of our progress to date, we know we must do more. That's why we have set more aggressive targets for resource conservation and zero-emission fleet vehicles.



*Employees from across SDG&E and their families volunteer regularly for environmental causes in our communities.*



# Sustainable Operations

Our focus on environmental stewardship extends to the office buildings and other facilities where we work. Over the past decade, we have made significant progress to reduce, reuse and recycle. Recently, we updated our facilities goals to raise the bar even higher, as we look to achieve zero net energy for all facilities we own by 2030. Meanwhile, we've purchased renewable energy credits as an interim measure to help offset the emissions at our facilities. Our supply management team is also stepping up efforts to source more sustainable goods and services.

## NEW Facilities Goals

### By 2030:

- Divert 100% of facilities-related waste from landfills by reducing, reusing, recycling and recovering waste materials
- Reduce facilities freshwater use by 50% (2010 baseline) by investing in low-flow/waterless fixtures, rainfall and water recovery systems and drought-tolerant landscaping
- Achieve zero net energy for all owned facilities (current usage ~5.5 MW) by exploring new building decarbonization solutions, energy efficiency, renewable energy credits and on-site generation
- Enable green miles via on-site charging with ~2,000 EV charge points
- Earn U.S. Green Building Council Leadership in Energy and Environmental Design (USGBC LEED®) (Silver+) certifications for all new construction

## 2020 Facilities Metrics

**3,102**

tons of waste generated

**46%**

waste diversion rate

**307 kW**

solar at facilities

**324**

EV chargers at SDG&E facilities

**14**

USGBC LEED® certifications



Century Park East Remodel. Photo courtesy of photographer Jeff Durkin and RNT Architects.

## Phasing Out Potent Greenhouse Gas

SDG&E is proactively working to remove SF6 – a very potent GHG – from 900 distribution switches and deploy only non-SF6 equipment by 2040. In 2021, SDG&E energized the first non-SF6, 69 kV dry air circuit breaker at our Glencliff Substation.



*I'm proud to tell my daughter that mommy not only goes to work to keep the lights on, but also helps make the planet healthy for her generation.*

**- Kimberley Ng, SDG&E Electric Distribution Engineer dedicated to phasing out SF6**



### ACCELERATED

## Fleet Decarbonization

SDG&E is committed to reimagining transportation – the single largest source of GHG emissions in our state and in our region. This commitment includes transforming our own fleet of vehicles that travel all around the region and to neighborhoods every day. In fact, we are accelerating our goal by five years from 2040 to 2035, to operate a 100% ZEV fleet. By the end of 2021, 18% of our fleet is expected to be electrified.



*SDG&E uses a fleet of cleaner and quieter hybrid bucket trucks to repair overhead power lines. Unlike conventional bucket trucks, these do not produce loud noises or fumes. Auxiliary functions, such as the bucket and crane, run on battery power.*

**Our work to decarbonize our fleet goes beyond purchasing ZEVs and also includes:**

- Investing in tools that capture metrics to help us improve safety, sustainability and operational efficiency
- Monitoring idling activity and installing idle mitigation systems in more than 20 vehicles this year
- Continually evaluating new electric vehicles coming to market and working with manufacturers to support customizations for our fleet



## Environmental Stewardship

Our commitment to environmental stewardship is broad, ranging from habitat conservation and tree planting, to employee volunteerism and tackling business challenges with nature-based solutions. Over the past 25 years, we have operated under a habitat conservation plan that we voluntarily developed with state and federal wildlife agencies. Our plan was designed to avoid or minimize any impacts from our activities and help preserve our region's ecosystems. This year we are expanding our work to include innovative ways to protect biodiversity, increase carbon sequestration potential and avoid GHG emissions across our region from the desert to the coast and everywhere in between.

Our goals for biodiversity and environmental stewardship vary by project and include:

- No net loss of wetlands or waters, including along the coast or sensitive upland vegetation communities, habitats and rare plants
- Net improvement in ecological conditions for any sensitive habitats that may have been temporarily impacted by operations
- Enhancement of existing habitats and the establishment of permanently protected preserves for important local animal species
- Net benefit to species listed as threatened or endangered by state or federal authorities, including the California Least Tern, an endangered migratory seabird that nests along our sandy coasts



*My children's love of nature strengthens my resolve to advance sustainability.*

**- Sandeep Aujla,  
SDG&E Senior Manager  
of Sustainability**

## Nature-Based Solution: Wildfire Mitigation With Goats

Approximately 220 goats are biting into potential wildfire ignition sources and carbon emissions. Our goat grazing pilot program utilizes goats to clear brush and other vegetation-ignition sources around electric infrastructure. The program is designed to help keep communities safe from potential utility-related wildfires.

Environmental benefits of goat grazing include maintaining open corridors, preventing the spread of invasive weeds and promoting the growth of native vegetation species. These goats can be utilized year-round for weed abatement without the risk of igniting fuels in high-fire risk areas.





## Nature-Based Solution: SDG&E Supports Biodiversity with Trees

In our first sustainability report, we committed to planting at least 10,000 trees annually to support local biodiversity, improve air quality, sequester carbon and conserve water – all benefits to the local communities, including schools and tribal lands. We are well on our way to achieving our goal this year, having planted more than 9,500 trees to date through creative programs that engage our customers and community organizations. As part of this initiative, we are also educating the public about planting the right tree in the right place to avoid conflicts with overhead power lines.



*In partnership with Healthy Day Partners and the Pala Tribe, 35 trees were planted on the Pala Reservation.*

## Clover Flats Seedbank Helping To Protect Biodiversity

Native plants are important to the success of habitat restoration efforts. However, it can be difficult to source local, native plant seeds in our region. To address this challenge, SDG&E helped develop a seedbank by leasing a portion of the Back Country Land Trust's Clover Flat property in southeastern San Diego County to grow native plants for seeding, harvesting, sorting and storage.





## Our Ongoing COVID Response

As the COVID-19 pandemic extends into another year, SDG&E has taken a multi-pronged strategy to help local residents, the regional economy and our customers recover. This includes working jointly with community organizations and public agencies to enroll customers in utility and rent payment assistance programs; partnering with the San Diego Regional Economic Development Corporation to rally large employers to redirect their spending to local small businesses as a means to spur an inclusive economic recovery; and collaborating with the San Diego Workforce Partnership to create a new job training program.

### COLLABORATION TO PROMOTE COVID ASSISTANCE PROGRAMS

# \$10M

In Emergency Rent & Utilities Assistance secured to help pay off local residents' outstanding energy bills

San Diego Housing Commission

San Diego & Imperial Counties Labor Council

Other community-based organizations

SDG&E

Our response to COVID-19 focuses on helping to keep our employees and their families, as well as our customers, healthy and safe. We have continually adapted to ever-changing conditions amid extraordinary challenges and implemented new programs to help our communities as we work together to recover from the pandemic.

Learn more about our COVID relief programs for residential and commercial customers respectively at [sdge.com/covid](https://sdge.com/covid) and [sdge.com/recovery](https://sdge.com/recovery).



In 2020, our employees assembled more than 500 “We Care” boxes for delivery to local businesses. The kits contained items to help small businesses re-open safely. SDG&E also helped more than 2,000 small business customers with disconnection moratoriums, payment plan changes, energy audits and other programs to provide financial relief during the economic recovery.

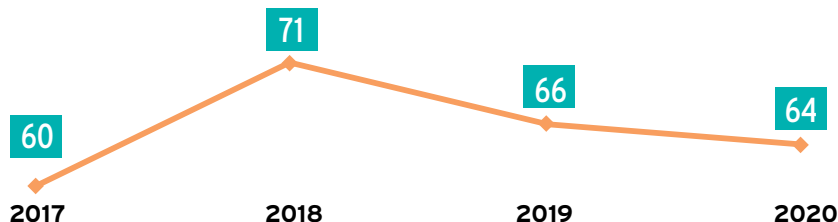
## Safety & Reliability

Safety and reliability are foundational to utility operations; our commitment to both is reflected in our drive to modernize our infrastructure and serve our customers in the face of a rapidly changing energy landscape and climate conditions.

### Driving Resilient Operations

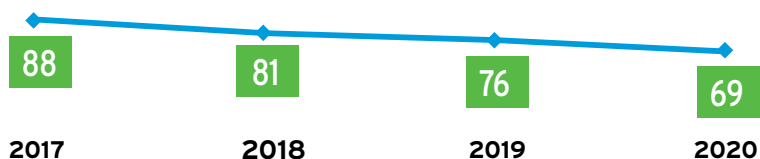
Our employees work 24/7/365 to provide reliable service for the 3.6 million people who count on us every day to power their lives. In 2020, for the 15th consecutive year, PA Consulting honored SDG&E with a ReliabilityOne® Award for Outstanding Reliability Performance in the West. PA Consulting also recognized SDG&E with awards for Outstanding System Resilience and Outstanding Technology and Innovation.

#### System Average Interruption Duration Index, in Minutes (SAIDI)

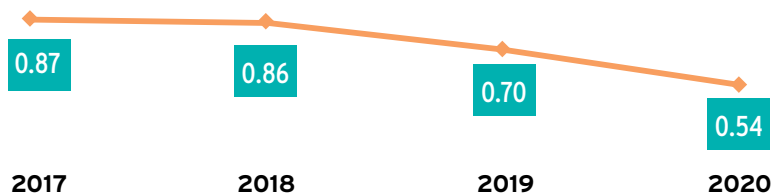


Due to our continuous efforts to improve safety, our injury rates and lost time incident rates (as defined by OSHA, the Occupational Safety and Health Administration) have declined year after year since 2017.

#### OSHA Recordable Injury Count



#### Lost Time Incident (LTI) Rate (per 100 employees)



*I am a big believer in creating a culture of psychological safety, where everyone, regardless of their title, feels comfortable raising questions and speaking up about concerns or mistakes.*

**- Kevin Geraghty**  
SDG&E Sr. VP of  
Electric Operations  
and Chief Safety Officer



# Champion People

At SDG&E, our sustainability strategy is centered on people - our employees, our customers, our suppliers and our stakeholders. We are dedicated to delivering clean, safe, reliable energy to not just power our region, but improve it. By investing in our diverse communities and highly skilled workforce, we believe we can achieve our shared goals and together build a more inclusive and sustainable future.



*SDG&E employees participated in a company-sponsored event focused on diversity, equity and inclusion.*

## Giving Back to Our Communities

Recognizing that many nonprofit organizations were struggling to keep their doors open and serve the growing needs of their clients, we nearly doubled our shareholder-funded charitable giving in 2020, and accelerated the distribution of funds. More than half of our charitable contributions went to organizations that focus on K-12 education, health and human services, the environment and safety and emergency preparedness.

Our top areas of focus in our charitable giving include:

14%

Economic and Workforce Development



**Economic and Workforce Development:** Partners with local organizations to offer and expand job training and career development opportunities, and to promote an equitable economic recovery

15%

Education



**Education:** Supports K-12 STEM education, mentorship and leadership development programs, with a focus on helping the region's most vulnerable youth reach their full potential

22%

Environment



**Environment:** Provides grants to local nonprofits focused on climate literacy, habitat restoration, tree planting, community gardens, trail building and other efforts

20%

Safety and Emergency Preparedness



**Safety and Emergency Preparedness:** Supports emergency responders and organizations that educate and prepare communities for emergencies, especially underserved communities

11%

COVID-19 Community Support

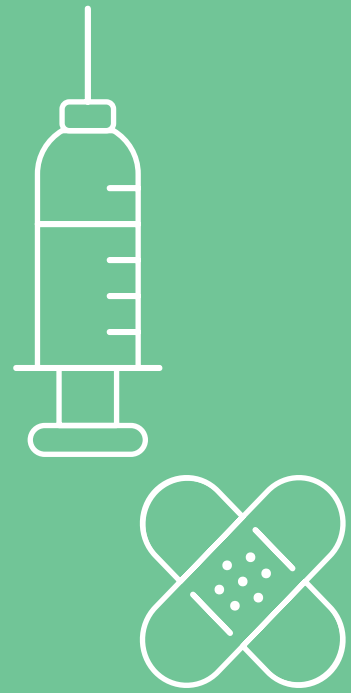


**COVID-19 Community Support:** Supports multiple initiatives through the San Diego Foundation to help those impacted by the pandemic and struggling to meet basic needs



## San Diego Black Nurses Association

SDG&E worked with the San Diego Black Nurses Association to fund community-driven vaccination events for communities of color. The San Diego chapter of the Black Nurses Association works to decrease healthcare disparities through advocacy, education and health promotion.



## Black Community Investment Fund

In September 2020, SDG&E joined The San Diego Foundation and others to launch the Black Community Investment Fund. Through grants disbursed to local organizations, the fund invests in community-led, innovative efforts that increase racial equity and generational wealth for Black San Diegans. Grantmaking is focused on four key pillars impacting economic prosperity among Black San Diegans – education, employment, housing and entrepreneurship.



*Education*



*Employment*



*Housing*



*Entrepreneurism*



# Creating Opportunities Through Diversity, Equity and Inclusion

At the heart of our value “champion people” is our commitment to invest in people and create an inclusive environment both inside and outside SDG&E. Although diversity and inclusion have always been important pillars in our company, the death of George Floyd, the racial justice protests that followed and the pandemic have led to an even greater sense of urgency to act on addressing the vast inequalities and inequities within our society. We have taken several steps designed to improve equity in our workplace and in the diverse communities we serve, starting with listening and learning.

7

Diversity & Inclusion  
Educational Webinars

8

SDG&E Diversity &  
Inclusion Councils

8

Racial Justice  
Forums

3,000

Employees  
Engaged in Community  
Conversations

\*Metrics are for Q1 and Q2 of 2021



*Having a workforce that reflects the diversity of the communities that we serve and an inclusive environment where everyone has a sense of belonging, supports innovation and better problem solving. We believe a high-performance culture is predicated on us having a diverse workforce that approaches problem solving from multiple perspectives.*

- **Maggie Carter,**  
**SDG&E Director**  
**of Diversity & Inclusion**

## Say Their Names Memorial Exhibit

SDG&E was among the organizations that helped sponsor the “Say Their Names” memorial exhibit, which featured 200 photographs of Black victims who lost their lives to racial injustice. Members of SDG&E’s Black Employee Business Resource Group, formed in February 2021, volunteered as docents for the exhibit.



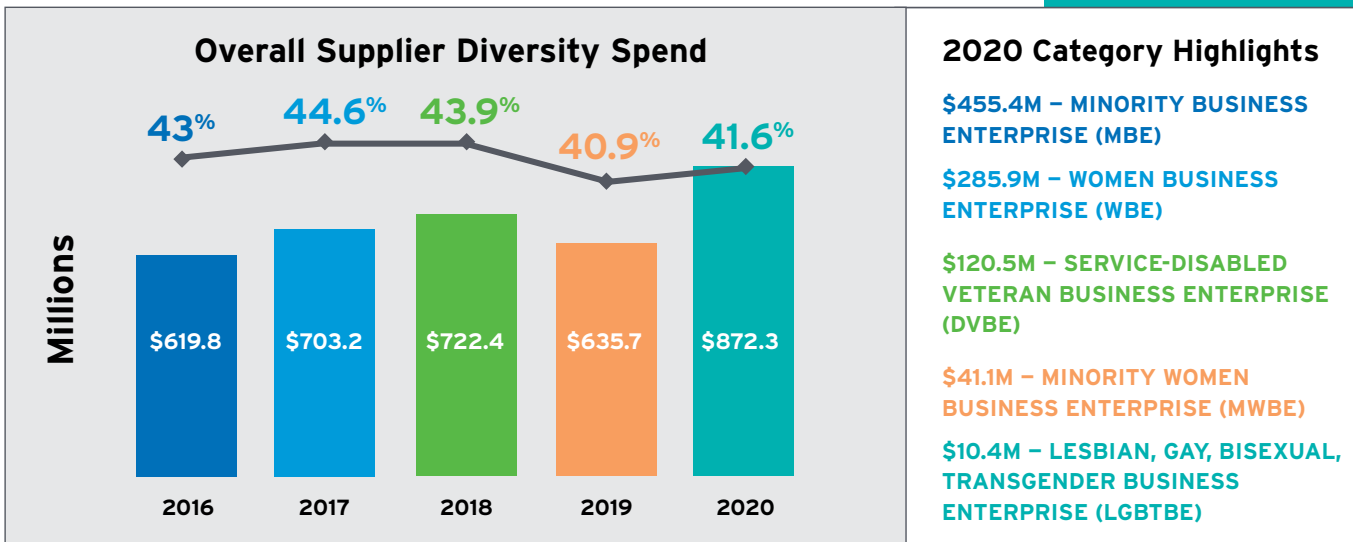


## Supplier Diversity

SDG&E has a long history of partnering with Diverse Business Enterprises (DBEs) that supply the goods and services we need to serve our customers. By working to build a more diverse supply chain, we continue to advance an inclusive culture and drive better business outcomes. During a time when the economy was devastated by the pandemic, SDG&E helped sustain many small and diverse suppliers by buying \$872 million, nearly 42% of our total spend, in goods and services from DBEs in 2020. Last year marked the eighth consecutive year that SDG&E's supplier diversity spending surpassed 40%, about double the goal set by the California Public Utilities Commission (CPUC).



SDG&E DBE Cordoba Corporation employees at a company event.



*SDG&E has an exemplary supplier diversity program that goes above and beyond to help small businesses succeed. Their procurement team provides the technical support we need to grow our business and compete for contracts. Seven years ago, we started as a subconsultant on an SDG&E project. Today, we are a prime contractor for several projects, employ 80 people in the San Diego area alone and occupy a 38,000-square-foot office building in Kearny Mesa.*

**– George L. Pla, Founder and CEO,  
Cordoba Corporation**



# Diversity, Equity and Inclusion

Although more than half of our workforce are people of color and more than a third are women, we recognize the work of building and maintaining a culture of inclusion, trust and respect is never done. After holding a series of community conversations with employees to create safe spaces to discuss race and racism, our company developed an action plan to increase racial equity.

Below are examples of our actions to advance diversity, equity and inclusion in our workplace. These five pillars are aligned with Semptra's enterprise-wide diversity, equity and inclusion framework.

## Leading From the Top



Established Executive Diversity, Equity and Inclusion (DEI) Council and included D&I goals in executive compensation

## Creating Opportunities



All officers will mentor at least one woman and/or person of color; interview panels will include people of color and/or women

## Accelerating Engagement



Created Black Employee Business Resource Group with a focus on the recruitment, retention and advancement of Black employees

## Partner With Communities



Sponsored San Diego Workforce Partnership's Construction Career Jumpstart Program

## Drive Conscious Inclusion



Expand outreach to new organizations with a focus on people of color and women



# Stakeholder Engagement

We engage with a wide cross section of more than 3,500 local stakeholders to listen, learn and find ways to improve. Having an active and engaged feedback loop is a key step in our “living” sustainability strategy as it helps us plan, prepare, act and evaluate our initiatives and continually improve our programs with the goal of creating impactful change for our region.



**Our employees, including our SDG&E Green Team**



**Local, regional, state and federal policymakers and regulators**



**Academics, researchers and scientists**



**Tribal nations and organizations**



**Community-based organizations**



**Local businesses and business associations**



**Customers and residents**



**Local cities and counties**



**Manufacturers**



**Industry groups**



**Labor groups**



**Public agencies**



**SDG&E Community Advisory Councils**



**Individuals with access and functional needs**

# Closing Thoughts

Our business plan is to take climate action. There is no difference between the two. We are aligning our investments with the climate objectives of local cities, the region and state. We will continue to evolve our efforts to reflect stakeholder feedback, regulatory changes and technological breakthroughs. We believe we will get there ... one project at a time.

SDG&E's commitment to sustainability is built into everything we do and we are holding ourselves accountable by providing regular updates on our work.

Follow our progress at [sdge.com/sustainability](https://sdge.com/sustainability) and [sdgenews.com](https://sdgenews.com).





# Forward-Looking Statements

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 the date of this document. 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,” “goal,” “aim,” “commit,” 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: California wildfires, including the risks that we may be found liable for damages regardless of fault and that we may not be able to recover costs from insurance, the wildfire fund established by California Assembly Bill 1054 or in rates from customers; 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, U.S. Federal Energy Regulatory Commission, and other regulatory and governmental bodies and (ii) states, counties, cities and other jurisdictions in the U.S. in which we do business; 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; 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; actions to reduce or eliminate reliance on natural gas, including any deterioration of or increased uncertainty in the political or regulatory environment for local natural gas distribution companies operating in California; weather, natural disasters, pandemics, accidents, equipment failures, explosions, acts of terrorism, information system outages or other events that disrupt our operations, damage our facilities and systems, cause the release of harmful materials, cause fires or subject us to liability for property damage or personal injuries, fines and penalties, some of which may not be covered by insurance, 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 electric power and natural gas and natural gas storage capacity, including disruptions caused by failures in the transmission grid or limitations on the withdrawal of natural gas from storage facilities; the impact of the COVID-19 pandemic on capital projects, regulatory approvals and the execution of our operations; cybersecurity threats to the energy grid, storage and pipeline infrastructure, information and systems used to operate our businesses, and confidentiality of our proprietary information and personal information of our customers and employees, including ransomware attacks on our systems and the systems of third-party vendors and other parties with which we conduct business; the impact on competitive customer rates and reliability due to the growth in distributed and local power generation, including from departing retail load resulting from customers transferring to Direct Access and Community Choice Aggregation, and the risk of nonrecovery for stranded assets and contractual obligations; volatility in inflation and interest rates and commodity prices and our ability to effectively hedge these risks; changes in tax and trade policies, laws and regulations, including tariffs and revisions to international trade agreements that may increase our costs, reduce our competitiveness, or impair our ability to resolve trade disputes; 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), and on Sempra’s website, [www.sempra.com](http://www.sempra.com). Investors should not rely unduly on any forward-looking statements.

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