

Paving the way to a Net Zero future



Our commitment

To learn more about our sustainability strategy and goals, visit sdge.com/sustainability

Building on its 2020 sustainability strategy, San Diego Gas & Electric® has made a commitment to reach net zero greenhouse gas emissions by 2045. The company’s climate pledge calls for eliminating all emissions associated with its operations and those generated by customers’ energy delivered by SDG&E®. The following projects represent the concrete steps that SDG&E has taken over the past year to accelerate the transition to a clean energy future.

Piloting green hydrogen innovations

California frequently curtails solar production in the middle of the day because supply far exceeds demand on the grid. Surplus solar energy can be leveraged to produce hydrogen – a versatile, clean molecule that has a variety of uses.

Borrego Springs Green Hydrogen Project

Location: Next to SDG&E’s existing Borrego Springs Microgrid in east San Diego County

Project description: The project will pilot hydrogen as long-duration energy storage; as a microgrid asset; and as a resource for dispatch by the California Independent System Operator (CAISO) to support grid reliability. SDG&E will install hydrogen storage containers that can support more than ten hours of energy storage for a fuel cell. An electrolyzer will produce hydrogen when solar energy is abundant, and the fuel cell will convert the hydrogen into electricity when needed by the grid, like during peak demand periods. The hydrogen assets will be

integrated with the microgrid so they can help power the remote desert community during emergencies or other contingencies.

Project status: Vendor selection complete. Expected to be operational in 2022.

Palomar Green Hydrogen Project

Location: The existing Palomar Energy Center in the City of Escondido in northern San Diego County

Project description: SDG&E will install an electrolyzer powered by new onsite solar canopies to produce hydrogen onsite and a hydrogen fueling station for its first fuel cell fleet vehicles. Hydrogen produced on site will be blended with natural gas as fuel feed for the electric generators. It will also be used as a cooling gas for generators and as fuel for its fleet vehicles.

Status: Vendor selection complete. Expected to be operational in 2022.

Scaling up energy storage

SDG&E expects to have 135MW of utility-owned energy storage integrated into the local grid by the end of 2021 to maximize the use of renewable energy and enhance reliability.

Top Gun Energy Storage

Location: Existing Miramar Energy Facility in the Miramar area of the City of San Diego

Project description: This 30MW/120MWh lithium-ion facility can provide the energy equivalent of serving 20,000 residential customers for four hours.

Status: Construction is completed, and commissioning process is underway. Facility to begin operation in June 2021.



Kearny Energy Storage

Location: SDG&E’s construction and operations facility in the Kearny Mesa area of the City of San Diego

Project description: This 20MW/80MWh lithium-ion battery facility can provide the energy equivalent of serving more than 13,000 residential customers for four hours.

Status: Broke ground in April. The facility anticipated to begin operation in late summer/early fall 2021.

Fallbrook Energy Storage

Location: Unincorporated community of Fallbrook in northeast San Diego County

Project Description: This 40MW/160MWh lithium-ion facility can provide the energy equivalent of serving more than 26,000 residential customers for four hours.

Status: Expected to break ground in fall 2021 and complete in late 2021/early 2022

Driving forward clean transportation

Transportation is the largest source of air pollution and greenhouse gas emissions in California. Facilitating the transition to zero-emission, plug-in vehicles will require a dramatic expansion of the electric vehicle charging network. SDG&E has multiple programs underway to expand the charging network and pilot vehicle-to-grid technology.

Vehicle-to-Grid Pilot Program

Location: Cajon Valley Union School District facility in the City of El Cajon in east San Diego County

Project description: This five-year V2G pilot will connect six electric school buses to 60kW 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 demand 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 that could be crucial for our pathway to net zero.

Status: Groundbreaking in April/May 2021. Construction completion in June 2021.



Charging infrastructure for Medium/Heavy-Duty Vehicles and equipment

Location: Throughout SDG&E’s service territory (San Diego & southern Orange counties)

Project description: This EV infrastructure program will build charging infrastructure to serve a minimum of 3,000 on-road and off-road class 2-8 vehicles at 300 sites, such as vans, school buses, transit buses and forklifts.

Status: In March, SDG&E energized the first EV chargers built under Power Your Drive for Fleets. Expect to complete the program by end of 2026.

Bringing chargers to schools, parks & beaches

Location: Throughout SDG&E’s service territory

Project description: This program will bring 336 EV chargers to over 50 sites: Level 2 (208-240 volt) chargers that can provide up to 10-20 miles of range per hour of charging and DC fast chargers (480 volt) that can provide about 50-60 miles per hour of charging.

Status: Broke ground in April 2021 on the first chargers under this program. Expected to complete the program in 2023.