

# EXECUTIVE SUMMARY

## FUEL CELLS CREATE RESILIENCY AND VALUE THROUGHOUT THE ENERGY SYSTEM

Stationary fuel cell systems are a **non-combustion** energy resource that generate clean, high efficiency, 24/7 power and heat, with virtually **zero emissions of criteria air pollutants** and **net zero water use**.

Fuel cell systems are today operating in microgrids and providing primary and backup power around the country. Able to island from the grid and provide power to sustain loads for prolonged duration outages, **fuel cells secure communities, critical facilities and infrastructure and ensure reliability**.

Fuel cell systems also significantly reduce the land footprint required for power generation in areas with high density and vulnerable populations.

## FUEL CELLS REDUCE GREENHOUSE GASES AND IMPROVE AIR QUALITY

Fuel cell systems for power and heat generation are unique non-combustion solutions that **reduce greenhouse gas (“GHG”) emissions** and decarbonize in commercial, industrial, multi-unit residential and other buildings. Many areas of California also face major challenges and health effects of air pollution. With high-efficiency and zero-emission of criteria pollutants, stationary fuel cell systems bring **environmental, health, and economic benefits** to communities that are disproportionately burdened by air pollution.

## FUEL CELLS SUPPORT AND ENABLE A 100% RENEWABLE GRID

As the grid evolves, California will require zero net carbon energy that also provides clean, firm, load-following power to complement intermittent and diurnal varying renewable power sources like solar and wind. Stationary fuel cells provide these attributes and merit consistent short- and long-term policy to enable robust integration into California’s energy and environmental strategies.

The **fuel flexibility** of fuel cells allows for a **seamless transition** from natural gas to **renewable fuels**. Policies that provide support to the use of fuel cell systems today facilitate this transition, while continuing the development of zero net carbon fuels is critical to realizing the benefits of stationary fuel cells for a 100% decarbonized future.



Photo: Bloom Energy Fuel Cell System  
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