

2030 Zero Carbon Vision

SMUD's groundbreaking path

SMUD's Clean Energy Vision puts the capital region's utility front and center in the fight against carbon emissions, climate change and air pollution. We're committed to removing all carbon emissions from our power supply by 2030.

That's not a typo – by 2030.

It's a tall order - a challenge SMUD is determined to meet without sacrificing the affordable rates and reliable service our customers have come to expect. For those who might say we can't possibly afford to do all this in the space of just nine years, our response is simple:

We can't afford not to do it.

Sacramento's poor air quality, along with the droughts and wildfires brought on by climate change, puts the region in an unsustainable position. In the American Lung Association's "2020 State of the Air" report, Sacramento was ranked the sixth worst city in the country based on the number of days of unhealthy and unsafe levels of air pollution in the ozone layer. Our childhood asthma rates are unacceptably high.

SMUD's 2030 Zero Carbon Plan focuses on four areas: proven and new clean technologies; new business models and partnerships; the retooling and retirement of our natural gas plants; and regulatory and financial strategies.



Proven clean technologies such as wind, solar, hydro, biomass, battery storage, energy efficiency and demand response will all play a big part. While today's carbon-free technology isn't capable of reducing our carbon emissions to zero, these resources can get us very close - 90 percent of the way. We're already halfway there, with 50 percent of our power supply carbon free today.

We are identifying new technology and business model options that enable us to work with like-minded partners in researching, piloting and bringing new technologies to scale. Possibilities include power-to-gas technology such as hydrogen and methane, and long-duration energy storage options, such as flow batteries and compressed air storage.

SMUD's decarbonization plan provides options for retiring or retooling our gas plants. Two of SMUD's five plants will be shut down by 2025. We're looking closely at reliability to finalize the schedule for retiring or refueling the other three plants. Hydrogen blending, or using hydrogen as fuel, could significantly reduce emissions from gas-fired plants. It's a young and exciting technology.

The financial aspect of the 2030 Zero Carbon Plan includes estimated costs ranges and associated rate impacts; potential alternative revenue sources such as partnerships and grants; investment schedules for expanding our existing clean technology; and research and piloting options.

A key element of the plan is in the electrification of buildings and vehicles. As our reliance on carbon-based fuels decreases every year, increased electrification of two of the largest energy users and polluters – homes and vehicles – will greatly reduce greenhouse gas emissions and improve local air quality.

SMUD's 2030 Zero Carbon Plan will drive economic development by creating jobs in the growing clean energy and clean tech sectors and encourage innovation. Importantly, it will help bring environmental justice to historically

underserved communities that are often located near freeways and power plants and left out of decisions and conversations about carbon emissions that impact their community.

SMUD recognizes that we can't accomplish our goal by going it alone. We need a wide range of support, including elected officials, local business groups, community leaders, technology companies, car manufacturers, solar companies, the federal government and more.

We also can't get where we want to go by asking our customers to pay for all of it. By partnering with the private sector, regulators and the community at large, we can achieve our goal with rates that remain affordable.

Environmental leadership has long been a part of SMUD's DNA, and never before has Sacramento's community-owned electric utility had a greater opportunity to make a difference in the lives of our customers - today's and tomorrow's.

For more information, visit CleanPowerCity.org.

