



MOVING IN A CLEANER, MORE SUSTAINABLE DIRECTION

In 2018, California legislators enacted some of the most ambitious clean energy and carbon reduction goals in the world. The state's utilities must have 60 percent of their power mix come from renewable resources by 2030, and by 2045, all retail electricity sold must be met by carbon-free resources.

With its Integrated Resource Plan (IRP) developed in 2018, SMUD is committed to moving further and faster than the state. In the near term, SMUD's Board of Directors set a greenhouse gas (GHG) goal of 60 percent below 1990 emissions by 2030. The longer-term goal for SMUD is to achieve a net-zero GHG position in 2040.

By focusing on local investments in renewable energy and building and transportation electrification, SMUD's IRP looks to achieve a 64-percent reduction in the Sacramento region's GHG emissions by 2040.

Utilities are required to submit an IRP to the California Energy Commission in early 2019, outlining their investment priorities through 2040.

A key component in SMUD's IRP is a \$1.7 billion investment over 20 years in the electrification of buildings and transportation. As California's reliance on carbon-based fuels decreases each year, increased electrification will reduce GHG emissions, improve air quality and spur economic development across the Sacramento region.





SMUD is partnering with developers in the region to create new all-electric single- and multi-family housing developments. Together with an all-electric smart home program incentivizing retrofits of existing homes, SMUD is boosting Sacramento's all-electric housing stock. (For more on SMUD's electric transportation efforts, see pages 15-18.)

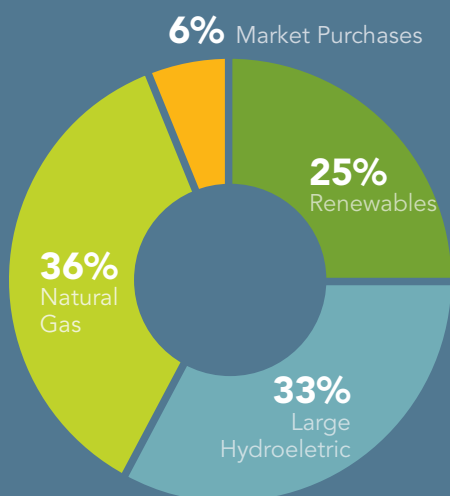
While cutting GHG emissions is a major goal of the IRP, so is ensuring reliable electricity for our customers. Based on today's technologies, the

IRP recognizes that at least through 2040, the Sacramento region will need a certain amount of gas generation for reliability purposes. SMUD will find offsetting reductions through electrification to ensure that our carbon footprint is net zero by 2040 – five years ahead of what the state is planning to do.

SMUD has laid out a bold vision for the Sacramento region's energy future, one which will leave a lasting footprint for decades to come.



SMUD RESOURCE CHART FOR 2017



AS SMUD'S POWER MIX INCORPORATES MORE CLEAN ENERGY SOURCES, THE ELECTRIFICATION OF THE TRANSPORTATION AND BUILDING SECTORS WILL HAVE AN INCREASINGLY POSITIVE EFFECT ON LOCAL AIR QUALITY.

(2018 figures not available; includes all renewables purchased for SMUD's Renewable Portfolio Standard and voluntary green programs.)