

HYDROGEN & BIOMASS ENERGY 2.0 PROJECTS IN THE GREATER SACRAMENTO REGION



1. SNR HYDROGEN LOCOMOTIVES

Sierra Northern Railway, the CA Energy Commission, and other partners are developing the nation's first hydrogen-fueled, zero-emission fuel cell electric switcher locomotive at the Port of West Sacramento. The Air District is administering over \$15M to develop and deploy three more.

2. SACSEWER BIOGAS RECYCLING

SacSewer is constructing an advanced technology biogas cogeneration facility. The cogeneration plant will use methane from the EcoWater Facility to generate renewable electricity and heat.

3. SACRT H2 HUB & BUSES

SacRT is developing a new regional hydrogen fueling facility at the McClellan Business Park. This facility will support a fleet of 29 hydrogen fuel cell buses and modernize SacRT's bus maintenance operations.

4. FIRST ELEMENT FUEL

First Element Fuel is working with Bosch Rexroth to build a hydrogen fueling station using cryo-pumps that will be capable of fueling light-, medium-, and heavy-duty vehicles at McClellan Business Park.

5. GUARDIAN YARDS METRO AIRPARK

The Guardian Yards Metro Airpark hydrogen project is exploring infrastructure for zero-emission vehicle charging and hydrogen fueling for commercial trucks.

6. ECOMOTIV HYDROGEN FACILITY

The Air District is working with EcoMotiv to bring the first biomass-to-hydrogen production facility to Sacramento County. The facility, supported in part by a \$1.5 million grant from the Air District, would create fuel using a non-combustion gasification conversion technology. The facility would serve light-, medium-, and heavy-duty vehicles and is planned for construction on Twin Cities Road near Interstate 5.

7. CARBONZERO.ECO

This new facility generates biochar from almond shells in Colusa and Yolo counties. The biochar is applied as a beneficial soil amendment to farmland, while sequestering carbon.