

BIOMASS

M A G A Z I N E

California funds biofuel, renewable gas demonstration projects

By Erin Voegelé | May 17, 2019



The California Energy Commission approved nearly \$11 million for clean energy demonstration projects May 15, including those for biofuels, renewable gas and microgrids.

A \$2 million grant was awarded to Technology & Investment Solutions to demonstrate a more sustainable and cost-effective process of creating biomethane from food waste at an existing anaerobic digester in El Mirage, California.

Information released by the CEC indicates the project will demonstrate a catalytic biogas reforming process to generate hydrogen syngas. The use of the process is expected to create biogas with a higher methane content, reducing the capital and operating costs needed to clean up the gas for use as transportation fuel. The process will also capture and convert CO₂, eliminating the need for flaring.

Fuel produced at the facility is expected to power a local fleet of waste hauling trucks. The project was funded by the CEC's Alternative and Renewable Fuels and Vehicle Technology Program, which supports clean transportation innovation.

The CEC also awarded a \$2 million grant to West Biofuels to fund the development and demonstration of a pilot-scale system to produce renewable gas and value-added alcohols by converting forest residue from high-hazard zones. The project will integrate gasification with a catalytic upgrading and novel gas separation process to demonstrate a full pathway from forest feedstocks to renewable gas production and use.

Another \$2 million grant was awarded to Taylor Energy to fund the pilot-scale demonstration of unique pulse-detonation gasification-reforming process to convert forest biomass into high quality renewable gas.

The CEC said the West Biofuels and Taylor Energy projects will both utilize wood waste from trees killed by the state's bark beetle infestation and drought. The projects were funded under the National Gas Research Program, which invests in technologies and solutions that help the natural gas sector support California's energy and environmental goals.

The remaining \$5 million was awarded to the Zero Net Energy Alliance to demonstrate advanced microgrids at schools and residential areas in the city of Lancaster.

Additional details are available on the CEC website.