

**Item #18**  
**June 29, 2011**  
**Energy Commission Business Meeting**

**Pixley Biogas, LLC**

**Grant Agreement ARV-10-053**  
**for**  
**Pixley Biogas Project**

**Summary**

This project was one of five projects selected under PON-09-003, Biomethane Production for Transportation, which provided \$26 million in funding to produce renewable natural gas for transportation fuel.

Pixley Biogas will build an anaerobic digestion facility adjacent to the existing Calgren Renewable Fuels Biorefinery in Pixley, California. The biogas facility will process over 36 million gallons of manure from three nearby dairies and supply the resultant biogas to the Calgren facility. Calgren, a 55 million gallon per year ethanol production facility, will use the biogas in their boiler.

The biogas facility is expected to produce 266 mmBTU of biogas daily. Access to a local supply of biogas, combined with improved operational efficiencies, will reduce Calgren's natural gas consumption by 402 mmBTU per day, the equivalent of 13 percent. This biogas effort will lower the carbon intensity of the ethanol produced at the biorefinery.

The Energy Commission is providing \$4,672,798 in Alternative and Renewable Fuel and Vehicle Technology Program funds and the project team will provide \$4,910,925 in match funds.

**Benefits**

The carbon dioxide reductions of the reduced natural gas consumption, combined with the avoided manure emissions, are estimated to be over 31,000 metric tons per year, the rough equivalent of removing 6,300 cars from the road. The biogas produced from the Pixley project will result in an estimated net greenhouse gas reduction of about 6 percent.

This project will further reduce Calgren's carbon intensity to 48.99 grams of carbon dioxide per megajoule, which represents an improvement of nearly 28 percent compared to the California average for ethanol.

Pixley Biogas will reclaim and process approximately 185 million gallons of the water used to flush the stalls through separation equipment. The process will remove at least 50 percent of the manure solids, resulting in a liquid that is suitable for on-farm recycling. Compounds, such as hydrogen sulfide and volatile organic compounds, will be reduced, helping improve air quality. This project will serve as a model for adopting advanced manure handling systems.

This project will create an estimated 23 jobs during construction and an additional two full time permanent jobs once the facility becomes operational. The project will also help retain nearly 18 jobs at its partner business, Calgren Renewables.

## **Participants**

Pixley Biogas, LLC is an affiliate of Calgren Renewable Fuels.

## **Implementation Schedule**

Pixley Biogas anticipates that the project, if approved by the Commission after it completes an independent review of the relevant environmental documents, will be completed in approximately 18 months.

## **CEQA**

The Chief Counsel's Office has reviewed this project to determine what level of environmental review is necessary under the California Environmental Quality Act (CEQA). The local lead agency, Tulare County, is currently conducting an environmental review of the project, has conducted an initial study, and has prepared a draft mitigated negative declaration. The Energy Commission is acting as a responsible agency under CEQA. Tulare County has not yet rendered a decision on the project and continues to receive numerous public comments on the draft environmental document.

The Chief Counsel's Office recommends allowing pre-CEQA work to begin on the project to allow a successful environmental review. This work has no possibility of affecting the environment, and will involve only a limited expenditure of funds. The Chief Counsel's Office further recommends that the Commission retain its discretion to modify the project, to evaluate alternatives (if appropriate), to retain the status quo (if appropriate), or to disapprove the project should the environmental impacts outweigh the benefits or if the lead agency's environmental analysis is incomplete.

After Tulare County completes its environmental review, the Commission will conduct its own independent review of the CEQA documents in its role as a responsible agency. Upon completing its review, the project will be returned to a Business Meeting for the Commission to make any relevant findings and determine whether to approve or disapprove the project.