Got Methane?

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More than 2,000 dairy cows in northwest Washington will be prime moo-oers in helping a western electric utility learn more about destroying greenhouse gas emissions that contribute to climate change.

PacifiCorp, which serves 1.7 million customers as Pacific Power and Rocky Mountain Power, recently signed a contract with The Climate Trust to purchase 50,000 metric tons (tonnes) of carbon dioxide equivalent, verified emission reductions from a livestock anaerobic digester project near Lynden, Wash. This project, operated by Farm Power, captures and destroys methane from manure management systems at MJD Farms dairy operations. Manure from three separate barns is pumped three-quarters of a mile to an anaerobic digester, which burns the methane to operate a turbine engine that creates electricity.

“Preventing methane from entering the atmosphere actually can have more environmental benefits than reducing carbon dioxide emissions,” said Mark Miller, PacifiCorp plant manager in Chehalis, Wash. That is because methane has a global warming potential 23 times greater than carbon dioxide, according to the Intergovernmental Panel on Climate Change. The 50,000 tonnes is equivalent to greenhouse gas emissions from more than 9,800 cars driven for one year.

PacifiCorp’s participation in this project results from the company’s 2008 purchase of the 520-megawatt Chehalis natural gas-fueled generating plant in western Washington. The Chehalis Generating Facility began operations in 2003, before the Washington Legislature passed requirements that now mandate that generating facilities mitigate a portion of their greenhouse gas emissions.

As part of PacifiCorp’s purchase of the Chehalis plant, the company agreed to provide $1.5 million in funding for greenhouse gas mitigation projects, including reimbursement of state agency staff for their time reviewing and approving proposals. The Lynden methane reduction project represents one key component of this mitigation portfolio.

The Climate Trust is responsible for managing carbon funds; identifying and acquiring emission reduction projects; overseeing monitoring, verification and delivery of carbon credits, and ensuring all projects conform to leading industry standards such as the Climate Action Reserve. The Climate Trust will transfer the Verified Emission Reductions to PacifiCorp.

“This project illustrates that investment in innovation such as digester projects can pave the way to new sources of renewable energy and economic stimulus for the local communities, in addition to helping protect the climate,” said Sheldon Zakreski, senior program manager for The Climate Trust.

In addition to the greenhouse gas credits being purchased by PacifiCorp, other environmental and economic benefits of the methane reduction project include:

- The clean energy produced by the digester and associated renewable energy credits are being purchased by Puget Sound Energy for its voluntary green power program. These credits are separate from the greenhouse gas credits purchased by PacifiCorp.
- Hot water, a byproduct of burning the methane, is used to help heat a nearby greenhouse.
- The improved manure management system improves local air and water quality.
- Farmers can use the other digester byproducts including a nutrient-rich liquid fertilizer and pathogen-free organic matter that can be used as cow bedding.

About The Climate Trust
The Climate Trust is a 501(c)(3) nonprofit organization headquartered in Portland, Oregon. The Climate Trust’s mission is to provide expertise, financing and inspiration to accelerate innovative climate solutions that endure. In order to arrest the rise in greenhouse gas emissions and to avoid the most dangerous
impacts of climate change, The Climate Trust pioneers ways to accelerate project, financing and policy implementation as a trustee of environmental assets in the renewable energy, energy efficiency, agricultural, forestry and transportation sectors.

**About PacifiCorp**
PacifiCorp is one of the lowest-cost electricity producers in the United States, serving more than 1.7 million customers in the West. PacifiCorp operates as Pacific Power in Oregon, Washington and California, and as Rocky Mountain Power in Utah, Wyoming and Idaho. With a generating capability of more than 10,620 megawatts from coal, hydro, gas-fired combustion turbines and renewable wind and geothermal power, the company works to meet growing energy demand while protecting and enhancing the environment.