

Vilsack Tours Methane Digester on Pennsylvania Dairy

A digester partly funded by a USDA Rural Development grant models energy efficiency.

Compiled by staff

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Agriculture Secretary Tom Vilsack on Tuesday visited a Pennsylvania dairy farm that is using an anaerobic digester to convert manure into electricity and high quality bedding, cutting energy costs and providing a resting area for more contented cows. The digester, which went on-line a year ago, was funded in part with the support of USDA Rural Development.

"It's a win-win-win," Vilsack said. "Using enhanced manure management techniques not only provides a new source of income for famers, it also improves air and water quality while providing renewable electricity for hundreds of homes in the community."

Family-owned Pennwood Farms uses an anaerobic digester to produce all of its electricity and sells power back to the local grid to meet the needs of an estimated 600 people. The digester also produces clean bedding as a byproduct, which saves the owners from having to buy bedding for the dairy herd. In all, manure from the 570 cow dairy farm creates about 920,000 kWh of electricity a year.



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The digester technology utilizes generators that are fueled by methane captured from the animal manure. Solid byproducts of the system are dried and used on the farm as livestock bedding material, and liquid byproducts are used as high-quality organic fertilizer in place of chemical fertilizers.

USDA supported deployment of the biodigester by providing grants and loans in 2010 totaling over \$528,000 through the Rural Energy for America Program. Last month, Secretary Vilsack announced funding under REAP for an additional 450 projects nationwide. REAP, authorized by the 2008 Farm Bill, offers funds for farmers, ranchers and rural small businesses to purchase and install renewable energy systems and make energy-efficiency improvements. These federal funds leverage other funding sources for businesses.

In addition to REAP, USDA also offers additional funding to help farmers install an anaerobic digester as part of their manure management system. Funding is provided by the Natural Resources Conservation Service's Environmental Quality Incentive Program.

Anaerobic digesters like the one the Secretary toured are in concert with an agreement with U.S. dairy producers signed by the Secretary in Copenhagen, Denmark in 2009 to accelerate adoption of innovative manure to energy projects on American dairy farms. Since the MOU was signed, the Obama Administration has provided 149 digester awards to eligible applicants.

With the Memorandum of Understanding, the Innovation Center for U.S. Dairy - part of the Dairy Management Inc. - the USDA and U.S. dairy producers are working together to reach a 25% reduction in greenhouse gas emissions by the year 2020. USDA will do so by undertaking research initiatives, allowing implementation flexibility, and enhancing marketing efforts of anaerobic digesters and energy efficiency improvements to dairy producers.

As part of the effort, a [Renewable Energy Education Field Day webinar series](#) on Digester Technology and Financing was conducted in partnership with the Farm Foundation, NFP, USDA, US EPA, Innovation Center for U.S. Dairy and the Wisconsin Bioenergy Initiative of the University of Wisconsin.

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