

Dave Sutordsutor July 17, 2012

High-tech farming: Ag secretary observes manure-to-methane process

BERLIN — U.S. Agriculture Secretary Tom Vilsack stopped by Berlin on Tuesday to see how the owners of Pennwood Farms are using the messiest byproduct of agriculture, manure, to create money-making methane.

In April 2011, the Stoltzfus brothers, Duane, Don, Glenn and Dwight, started operating an anaerobic digester that converts dairy cow waste into methane for generating electricity. The process also leaves behind solid, dry chips for animal bedding and a liquid to spread as fertilizer.

They received partial funding support from United States Department of Agriculture Rural Development.

"This operation is reflective of the attitude that a lot of farmers have about the need to continue to ask the questions how can we improve, how can we be more efficient, how can we take advantage of technology," Vilsack said.

"This is a great example of an operation that is multigenerational and supporting multiple families."

Local farmers and politicians came out to see Vilsack, who visited the farm on his way from Pittsburgh to Harrisburg.

"I think this is certainly an opportunity for him to see the return on the investment that the federal government can make in form of subsidies to make sure that this technology moves forward," said Somerset County Commissioner Pamela Tokar-Ickes. "Government can fund ideas, but the private sector puts them into action, so this is truly, I think, a good opportunity for him to see how a small rural area can really implement some of the new technologies that are out there in agriculture today."

Pennwood Farms, with about 570 cows, has generated more than 1 million kilowatt-hours with its digester.

The farm has consumed half of the electricity.

The rest has been sold on the electrical grid, meeting the needs of an estimated 600 people.

"We certainly generate more than enough to run the farm here. ... That part of it is doing pretty much just exactly what the company that designed our system told us it would do," Duane Stoltzfus said.

USDA supported the biodigester development by providing \$528,000 in grants and loans through the Rural Energy for America Program.

The Stoltzfus brothers contributed matching funds to complete the cost.

Along with Pennwood Farms, more than 140 other agricultural businesses have been provided digester awards since 2009.

"It's obvious that it's a popular notion because we continue to get applications," Vilsack said.

Working together, the Innovation Center for U.S. Dairy, USDA and dairy farmers hope that the digesters can help the industry reach the goal of reducing its greenhouse emissions by 25 percent by 2020.

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