

PROGRESSIVE DAIRYMAN

New report may change dairy industry's goals for digesters

Written by PD Editor Emily Caldwell

This article is a follow-up to the 2011 article, "Future of U.S. digester industry prime topic at AgSTAR Conference." [Click here](#) to read.

In 2011, [Innovation Center for U.S. Dairy](#) Renewable Energy Director Jerry Bingold said the U.S. dairy industry had launched a goal in 2009 to establish 1,300 anaerobic digesters in operation by 2020. This goal was intended to enable the industry to continue to improve sustainability and enhance manure management practices and revenue on farm.

But recent research suggests that the industry may not need 1,300 digesters to achieve efforts of reducing greenhouse gas, Bingold says.

"Our original goal called for reducing greenhouse gas emissions by 1.8 million tons," he explains. "With the current fleet of digesters, we've already met about 58 percent of that goal by reducing emissions by 1.04 million tons per year."

Bingold says that digesters have become much more efficient, and in fact, only 160 digesters are in operation on dairies in the U.S. today.

Although the 1,300 number isn't necessary to reach goals in reducing greenhouse gas emissions, it does have potential for exciting business opportunities, Bingold says.

The industry had originally identified that the business value of 1,300 digesters was a minimum of about \$38 million to dairy producers.

A new report from [AgriLogic Consulting](#) suggests that the market value on that many digesters could be as much as \$1.5 billion. The third-party firm calculates a return on investment of about 24 percent.

"One thing we realized very clearly is that we underestimated the full value of anaerobic digesters," Bingold says. "The original estimates were based on producing electricity only, when in fact, digesters producer far more than that as part of a bio-economy."

Digesters have the ability to incorporate food waste (and thus greatly reduce the amount of food waste), while

producing high-valued nutrients like nitrogen and phosphorus. These nutrients help to offset the need for fossil-fuel based fertilizer.

With digesters, dairy producers also have the ability to take advantage of several programs such as CO2 emission reduction credits and renewable energy credits.

The next steps

Bingold says the Innovation Center for U.S. Dairy plans to release a report on market value, after peer review, in early 2013. Bingold says the projected value could be as much as 10 times as the original assessment.

From there, the Center will focus on developing strategies to meet those goals and plans to involve financial institutions, digester developers, dairy producers and the NGO community.

The Center also aims to help enhance the market for the products that digesters are capable of producing.

"Assisting with this is the sustainability drives from Walmart and other retailers that see a similar vision around zero waste and renewable energy," Bingold says. "In our framework, we're trying to align ourselves with the sustainability partners so that we're all heading in the same direction." **PD**

Click [here](#) for online version.