

Why On Farm Anaerobic Digesters Are Different Than Other Forms of Alternative Energy

The driver for anaerobic digesters is the need to manage manure. Dairy farmers and animal agricultural producers are being driven to digesters because they are an effective technology to manure effluent management and allow the dairy farm to meet its environmental compliance responsibilities. Digesters are a solution to a problem, not an alternative business for the dairy farm.

Allowing dairy farms to net meter their excess energy provides the essential revenue stream to pay for the heavy financing load and operational costs of the digester, and is the only way a dairy farm with a digester can positively cash flow the expenses of a digester or even access capital to employ the systems.

These systems are incorporated into Pennsylvania's Chesapeake Bay Watershed Implementation Plan (WIP) as an integral technology for not only farms, but the Commonwealth in meeting its obligation to reduce nutrient load from runoff, manage nutrients and generate other environmental benefits. Digesters are included in our Watershed Implementation Plan as a critical technology and the United States EPA has accepted digesters as part of the Commonwealth Chesapeake Bay compliance plan.

How On Farm Anaerobic Digesters Are Different Than Other Alternative Energy Operations

Digesters solve environmental compliance requirements for dairy farms: manure management. The revenue stream from digesters excess energy is the way the farm pays the capital costs and financing load of constructing the digester.

Digesters are sized (oversized) by the manure management needs of the dairy farm today and its farm and herd growth needs for the future during the life span of the system. There is an inherent limit to the amount of energy that a dairy farm will ever produce.

On farm digesters are sized for environmental reasons, not energy production reasons.

The Pennsylvania WIP contemplates more digesters within the Chesapeake Bay watershed and smaller farms will eventually consider "community digesters" which will serve two or more smaller farms. This will have positive impacts for the state, the local community, the farm and the Bay.

Even anticipating a "build out" of on farm digesters within Pennsylvania, the number of potential digesters is small—approximately 100 or so. On farm generators are thus differentiated from solar, wind, and landfill generators.

Why Net Metering Is Essential for On Farm Anaerobic Digesters

Dairy farms have constant production of bio fuel for digesters: manure and effluent is produced every day while the energy needs of the farm vary with the weather and the seasons. The constant need to manage manure necessitates the constant operation of digesters but the energy load of the farm fluctuates. This is the reason dairy farms have to have net metering.