

Dane County, Wisconsin, to construct biogas cleaning system

By Dane County, Wisconsin | April 24, 2018

On April 19, Dane County Executive Joe Parisi kicked off construction for an innovative project that will turn garbage and cow manure into renewable fuel for thousands of vehicles across the region and country. This project is also expected to significantly increase our lakes clean-up efforts by increasing revenue opportunities for local biogas digesters.

“Taking cow manure and garbage and turning it into vehicle fuel is good for the air we breathe, the waters we fish and swim in, and county taxpayers,” Parisi said. “Dane County is committed to accelerating work to clean up our lakes and financing efforts to produce renewable energy, and this project does both.”

Design work of the new facility is complete, BIOFerm has started ordering its system components, and the remainder of the project is out for bid now. Construction is expected to begin in the coming weeks with the system online by spring of 2019.



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Dane County, Wisconsin, is breaking ground on a new biogas project.
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Dane County announced this today at a press conference with project partners Cornerstone Engineering, Clean Fuel Partners and Bioferm Energy, who is designing and supplying the biogas cleaning system for the project.

“BIOFerm is honored to be building this amazing green project for the county landfill which will serve as a beacon for all municipalities on how to maximize resources,” said Nadeem Afghan from BIOFerm. “We are proud to be a local company working to deliver this project and creating great economic value and jobs in the process. This project once completed will have the capability to deliver 0.5 billion gallons of clean transportation fuel which would be a great contribution by Dane County to save our environment from fossil fuel economy.”

The Dane County landfill currently generates electricity with the gas collected from the breakdown of garbage and organic material. Presently, the landfill makes enough electricity to power 4,500 homes. This new facility will enable the county to convert its landfill gas into vehicle fuel, thereby eliminating thousands of tons of carbon emissions, a leading cause to the extreme weather events triggered by climate change. In addition to the project’s environmental benefits, it is estimated the county will generate enough revenue from the project to payback its \$25 million cost of the project in just a few years. That creates economic opportunity for both Dane County taxpayers and owners of “Cow Power” facilities north of Lake Mendota to convert their operations to gas production.

The county’s 2018 budget included the final phase of funding totaling \$23.5 million for Dane County to build a biogas processing facility at its landfill and connect it with an adjacent interstate pipeline. That facility will clean up all of the collected landfill gas and turn it into renewable vehicle fuel. Of the total \$23.5 million cost, \$5.5 million is new funds in the 2018 budget. Those additional funds will allow the county to build a gas off-loading station where other biogas producers, like dairy digesters located in the North Mendota watershed, can bring their cleaned up fuel and have it injected into the pipeline. The gas would first need to be purified and compressed by the owner’s equipment before being hauled to the landfill for injection into the interstate pipeline.

This Dane County project is the first in the nation to be able to receive biogas from multiple off-site locations and connect that renewable gas with CNG gas stations locally and across the nation.

The 2018 county budget also included a \$200,000 study to look into where additional digesters could be located to process manure into biogas. This will keep more manure off the land, reducing phosphorus on fields prone to runoff during heavy rain events that can get into waterways and cause algae blooms.

“Dane County continues to find game changing solutions to protect our lakes, produce renewable energy, and reduce climate change emissions,” said Jessica Niekrasz, chief administrator officer of Clean Fuel Partners, whose company purchased the community digester near Waunakee in late 2015. “Our innovative private-public partnership with family-owned dairy farms will continue the work to economically remove phosphorus from the watershed.”

Digesters reduce greenhouse gas emissions by collecting and destroying methane that would otherwise be emitted to the atmosphere. They also help farms manage manure more responsibly, which reduces harmful runoff to lakes and streams. The county’s new facility at the landfill will make it economically feasible for manure digesters in the county to continue to produce renewable energy, reduce greenhouse gas emissions, and clean up our lakes.

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