



## Biogas Project Profile

# UW-Oshkosh Urban Dry Digester

## Oshkosh, Wisconsin 54902

**Owner:** University of Wisconsin Oshkosh Foundation

**Developer:** BioFerm Energy Systems

**Contact:** Brian Langolf, 920-420-6693, langolfb@uwosh.edu

**Date Construction Started:** 9/15/2010

**Date Tank Started Being Filled:** 8/24/2011

**Date Project was Fully Operational:** 10/17/2011

### Project Summary:

This project started 6 years ago with initial goals to help campus meet our sustainability initiatives and bring a technology to our students and faculty, which at that time was new to North America. With the construction of the nation's first industrial dry anaerobic digester we developed a program for our faculty and students to utilize the digester as a living-learning laboratory. This project has led to much collaboration over the years with both the private and public sector through development of food diversion programs in our community, development of a composting operation and many other educational outreach activities.

### What makes this project special?

I think this project is special since it was the first industrial dry digester in the United States and serves as an example that community based food and yard waste digesters can exist and flourish. We have made great strides over the past 6 years, in a

**Organizations involved:** *University of Wisconsin Oshkosh, University of Wisconsin Oshkosh Foundation, BioFerm Energy Systems, City of Oshkosh, Sanimax, 2G Energy, Wisconsin Public Service*

## Inputs and Outputs

Source of biogas:	Food waste from UW Oshkosh campus and neighbors
Feedstocks:	Food Waste (pre consumer, post consumer and industrial food waste streams) - 5,300 tons per year Yard Waste (grass, leave and brush) - 2,300 tons per year Farm Residuals (straw or left over crops and solid bed back) - 2,400 tons per year

**Biogas generation:** The biogas plant itself produces approximately 27 million SCF per year.  
We also get excess biogas from the neighboring WWTP when it is available however that amount is variable and currently not tracked directly at the biogas plant. Information from the WWTP and CHP run time indicates that it supplies approximately 14 Million SCF per year  
With the CHP we average around 2.1 Million KW each year

## Finances, Beneficiaries, and Expansion

**Project financing:** The University of Wisconsin Oshkosh Foundation financed most of the \$4.7M project with a loan. We did receive grant funding through the Wisconsin State Energy Office for \$231,587, the US Department of Energy for \$500,000 and U.S. Treasury Section 1603 for \$1.0M

**Customer(s):** The local utility (WPS) currently buys the electricity

**Long term/Expansion plans?** Long term project plans at this site include conversion of our Biogas to renewable CNG to fuel city buses and service vehicles. We are also looking to expand the sales of compost in our community through our Titan Gold brand with new product lines in development. In addition we are developing goals to remove additional nutrients from our liquid digestate so in the future we only have clean water to dispose of bringing our facility full circle.

### Photos

