

UWO, partners dedicate innovative biodigester

by Mandy Potts - Wednesday, May 18, 2011

<http://www.uwosh.edu/today/12378/uwo-partners-dedicate-innovative-biodigester/>

Once up and running, the nation's first commercial-scale dry fermentation anaerobic biodigester -- an innovative system transforming heaps of food waste and lawn clippings into renewable energy -- will produce enough electricity for at least 210 homes per year.

It will also pump out enough energy to heat another, at least, 180 homes per year.

And it will accomplish all this from its modest corner at the University of Wisconsin Oshkosh campus, which itself expects to benefit, with about 10 percent of its electricity and heat emanating from the innovative plant.

UW Oshkosh hosted a ribbon cutting ceremony and dedication May 18 to celebrate one more of the institution's many renewable and sustainable energy initiatives.

"We need to expand the notion of sustainability so it gets highlighted and integrated into all we do," said Chancellor Richard Wells. "This facility really represents that...it allows us to enhance the state-of-the-art teaching and research happening here."

UW Oshkosh's new biodigester brings a leading-the-way technology to the University, several speakers remarked at the ceremony.

"This project is one that our office thought would be a worthy project," said Gregg Underheim, who spoke on behalf of Congressman Tom Petri's office. "What no university in the Americans has is this. This is a wonderful accomplishment. It's a strong statement to your commitment to the environment, to your commitment to academic excellence."

The biodigester facility will take waste into large chambers and extract gas to create energy. The chambers are designed to handle 8,000 tons per year of organic material such as food waste, yard waste and crop residuals. From there, the material remains in one of the four fermentation chamber for 28 days, fermenting and producing the gas to be transformed into electricity and heat.

Vice Chancellor for Administration Tom Sonnleitner said the biodigester's purpose is not only to produce energy, but to also give UW Oshkosh students the unique opportunity to work in a laboratory setting that is the plant itself.

The facility also allows UW Oshkosh to partner with the City of Oshkosh in providing energy, said City Manager Mark Rohloff, who thanked UW Oshkosh for creating a great relationship between the two entities.

The biodigester plant's proximity to the neighboring municipal wastewater treatment plant is driving a

collaborative agreement that will, eventually, allow UW Oshkosh to also harness energy from a nearby city heat plume. It is just one more of the many collaborations associated with the innovative campus power plant.

The biodigester is a collaborative effort with the UW Oshkosh Foundation, which purchased the land, and is partially funded with a \$232,587 grant from Wisconsin Focus on Energy and a \$500,000 grant from the federal government.

“This facility is good for UW Oshkosh, our community, our region and good for Wisconsin on so many levels,” said Arthur H. Rathjen, president of the UW Oshkosh Foundation. “Take the time to share with others how forward-thinking and responsible this project is and how it happened at UW Oshkosh, and more importantly in Oshkosh.”

Rathjen joked that the biodigester's reliance on organic food scraps and waste turns on its head a decades-old executive order issued by then-president Woodrow Wilson urging American children to "clean their plates."

“Well, with all due respect (to Executive Order 2679-A), we offer an alternative to that executive/presidential directive and to the youngsters of the Fox Valley who hate vegetables," Rathjen said. "You have a choice: You can sit at the dinner table for hours on end, avoiding your brussel sprouts, lima beans and asparagus, or you can intelligently tell mom and dad to send your table scraps to the University.”

Organic materials for the biodigester will be provided by both campus and community sources.

Other activities were also held throughout the day May 18 to highlight the innovative sustainability efforts at UW Oshkosh. Events include tours of the campus' renewable energy facilities, a keynote luncheon address by Chancellor Wells and breakout sessions with university experts in business, local government and education.

UW Oshkosh is among the greenest universities in the country, having recently been recognized by The Princeton Review's Guide to 311 Green Colleges and ranked 35th nationally on Sierra Magazine's Cool Schools list. A comprehensive Sustainability Plan was adopted in 2008 with goals for energy efficiency and alternative energy. In 2009, following carbon-footprint studies by Johnson Controls and University staff, the University established one of the nation's most aggressive Climate Action Plans to achieve carbon neutrality by 2025.

Read more:

- [UW Oshkosh's biodigester project website](#)
- [Snapshots: May 18 biodigester dedication](#)