



# Wisconsin Biogas Informational Symposium

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**When:** Wednesday, February 15, 8:30 to 10:30 am.

**Where:** State Capitol, RM 412 East

**Organizers:** Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), Wisconsin State Energy Office (SEO), and the Wisconsin Legislative Council

This symposium will describe biogas, a renewable fuel similar to natural gas, and the biogas systems that convert manure, food processing byproducts and other wastes into a wide range of valuable fuels and products. Wisconsin is already leading the country in farm-based biogas systems using dairy manure, but has only scratched the surface of the potential use of biogas systems to manage wastes for existing industries, produce valuable and cost-effective renewable energy and put Wisconsin's manufacturing expertise to work in an expanding sector. DATCP Secretary Ben Brancel will start the program and describe the potential benefits of biogas systems for Wisconsin's agriculture industry. DATCP and SEO biogas specialists will then provide an overview of Wisconsin's successful application of biogas systems across the state and the emerging opportunities for biogas systems. Representatives from some of Wisconsin's leading biogas businesses will then share their experiences saving money, producing energy, and building employment in diverse industries across the state. Speakers will be available for a question and answer session at the end of the program.

## Questions that will be answered at this symposium:

- What is biogas?
- How has biogas been used to create heat, electricity, pipeline-quality natural gas and even vehicle fuel in Wisconsin?
- What emerging opportunities can biogas systems provide for Wisconsin's dairy, food processing, and bioenergy crop industries and cafeteria, grocery and residential food waste producers?
- How do biogas systems create fertilizers and other valuable byproducts, reduce water pollution, and solve wastewater management problems for industries across the state?

Breakfast snacks will be provided.

*Detailed Agenda on Reverse*

## Agenda:

**Welcome and introduction - Wisconsin Legislative Council Co-chairs** 8:30 am

**"Biogas is a strategic part of Wisconsin's Agriculture and Economic Future"**  
DATCP Secretary Ben Brancel 8:35 am

### Biogas Overview

*Sara Walling, DATCP, and Peter Taglia, SEO.* 8:45 am

Biogas is a renewable fuel produced by microorganisms as they consume wastes in a closed container called an anaerobic digester, or similar systems. The bacteria in biogas systems dramatically reduce the strength, odor and water pollution risk of manure, food processing, and other organic wastes. At the same time, nutrients in the wastes are converted to valuable fertilizers and other useful byproducts such as animal bedding and potting soil. The biogas produced in the process can be used as a substitute for conventional fuels in heating, electrical generation, vehicle fuel and industrial feedstock applications.

### Agricultural Biogas in the Dairyland

*DVO, Inc.* 9:00 am

Wisconsin, with over 35 anaerobic digesters at 25 dairy farms, leads the country in the conversion of dairy manure into biogas and other useful products. Biogas is an important part of the future of Wisconsin's \$28 billion dairy industry by managing waste, increasing the sustainability of dairy farms and increasing farm income. With over 10,000 licensed dairies, however, biogas has only scratched the surface of this state's potential. Most of the current manure systems in Wisconsin have been installed at larger dairy farms, but newer anaerobic digester designs and newer business models (such as community manure digesters serving multiple farms and mixing manure with food processing wastes and energy crops) are expanding the benefits of biogas across dairy farms of all sizes. In addition, the engineering, construction, and operation of biogas systems tap into Wisconsin's large business community of agriculture and waste process engineering, stainless steel piping and electrical control manufacturing and installation, and new product marketing opportunities such as animal bedding fiber, building materials and specialty potting soils.

### Industrial and Municipal Waste Management with Biogas

*Applied Technologies, Inc.* 9:15 am

Over 60 publicly-owned wastewater treatment plants and 23 facilities in Wisconsin processing a wide range of food products (from small specialty cheeses, large volume cream cheeses, beef products and canned beans) use anaerobic digesters to reduce the volume and strength of wastes and produce biogas. With over 1,000 food processors in Wisconsin and other related industries with organic wastes, such as ethanol plants, schools and groceries, Wisconsin has one of the largest concentrations of potential biogas projects in the country. Biogas systems at these facilities not only lower the cost of waste treatment, they will allow facilities to continue to expand production while meeting more stringent water quality discharge requirements.

### Biogas Energy: Versatile, Scalable, Economical

*Cornerstone Environmental Group* 9:30 am

The largest component of biogas is methane, making biogas a useful renewable substitute for natural gas. Most anaerobic digester systems in Wisconsin burn the biogas in boilers for heating or in generators to create electricity, but Wisconsin businesses have been pioneers in expanding the opportunities for biogas to be further cleaned and upgraded to meet the specification of natural gas in Wisconsin's pipeline systems or used as a vehicle fuel in compressed natural gas vehicles. Municipalities such as Dane County and Janesville are using biogas in locally-built and engineered compressed natural gas (CNG) fueling systems to save thousands of dollars over the cost of diesel fuel in their fleet vehicles. Many more truckers and fleets across the state are exploring the complementary use of both biogas and conventional natural gas to lower fuel costs and reduce vehicle noise and emissions.

**Question and Answer Session** 9:45 am to 10:30 am