Focus on Energy

WISCONSIN BIOGAS DIGESTION PROGRAM

Because of Focus on Energy's biogas program, Wisconsin leads the nation in the number of farm-based anaerobic biogas digesters producing electricity, heat, and pipeline-quality gas. Biogas digester systems enable farmers to produce distributed energy for a reasonable return on investment while controlling dairy manure odors, pathogens, and flies. The Wisconsin program provides information, education, technical assistance, and financing to promote digester installations.

Why a Biogas Program

Wisconsin's large dairy and food processing industries require significant amounts of energy and generate considerable amounts of waste. To stay competitive, large farms need a cost-effective solution to the odors, pathogen presence, and intense nutrient loadings from animal manure. The Wisconsin biogas program advances renewable energy while helping farms remain profitable.

Of Wisconsin's 17 installed digester farms, 11 received funding and other services from Focus on Energy. Those 11 projects have a capacity of nearly 5 megawatts and annually produce more than 36,000 megawatt-hours of electricity. The 13 projects under construction will roughly double that capacity and electricity generation.

Focus on Energy realized early on that financial incentives alone would not lead to the installation of many biogas digesters. Instead, it was important for the various players to
become comfortable with the technology, understand the market, and collaborate on solutions. Focus therefore encouraged biogas information exchange among the various stakeholders and developed a carefully crafted measurement and verification program. The agency has co-sponsored an annual anaerobic digester biogas conference for five years. It monitors three biogas systems using a scientifically reviewed protocol developed by the US EPA to provide a standard method of evaluating digester biogas system performance. And Focus funded the Wisconsin Agricultural Biogas Casebook, which includes case studies, including farmers' experiences and performance data.

A Limited Budget Encourages Cooperation
Initially with a just a small budget for the biogas program, Focus on Energy emphasized cooperative activities with partners. Focus worked closely with the state's utilities to make it easier to interconnect biogas systems to the utility grid and to institute higher rates for electricity produced from biogas. Focus shares conference display space and conducts joint educational forums with county development organizations, watershed groups, dairy business associations, and the Wisconsin Milk Marketing Board. Focus also participates in monthly meetings of the Wisconsin Biogas Development Group, which includes farmers, government agencies, universities, supply-chain participants, researchers, and the agricultural press. Focus worked with members of the Wisconsin agriculture community to secure 32 digester grants from the US Department of Agriculture via the Section 9006 Renewable Energy/Energy Efficiency Program.

All these cooperative activities have helped the biogas program to popularize renewable energy among constituencies that may not have traditionally supported it. The biogas program has provided a "comfort zone" where farm groups, lenders, local governments, regulators, utilities, and environmental groups can meet and collaborate.

Building on Success
Based on the success of the program, Focus on Energy's biogas program budget for calendar year 2009 has grown to $2.3 million, five times greater than just three years ago. Nearly 90 percent of the money will be used for incentives. The agency has actively disseminated information about the Wisconsin biogas experience to other states. Vermont and Indiana are already employing some of the technologies that were pioneered in Wisconsin.

Judges' Comments
Focus on Energy identified an underused renewable energy resource and then designed a comprehensive, multi-faceted program to utilize that resource. This innovative program has both economic and environmental benefits. It demonstrates leadership and is influencing other states.