

Biogas Policy

Attendees of this breakout session were very enthusiastic about biogas policy items in Wisconsin and came to the table with many examples with their firms regarding the need for policy change. Approximately 30 attendees from many different parts of the state's biogas industry were involved.

There were five primary topics of conversation:

1. The state of [power purchase agreements \(PPA\)](#) for biogas facilities that produce electricity
2. The resistance to [renewable natural gas \(RNG\)](#) injection into the [existing natural gas distribution system](#) in Wisconsin, and how the current business structure of the natural gas utilities presents barriers for problem resolution
3. How to go about rallying support for biogas industry-related initiatives
4. Resolving unknowns about the total biogas commodity size and capacity in Wisconsin to be leveraged for policy change
5. What role does nutrient management play in advocating for the development of the biogas industry?

Topic One: PPAs and the value of energy production

- Current PPAs are set to expire in the coming years with little evidence electric utilities are willing to carry on current rates. Most utilities have referenced the avoided cost rate of \$0.015 to \$0.035/kWh going forward. The survey results indicated that a minimum of \$0.08/kWh was necessary to justify the operation of a generator at a biogas facility.
- Past discussions about updating the [renewable portfolio standard \(RPS\)](#) in [Wisconsin](#) were dominated by wind interests. This meant that wind generation in the state stood to benefit from favorable agreements with utility companies compared to biogas producers. For the [current RPS goals \(10% by 2015\)](#), wind made up approximately 2/3 of the renewable energy generation.

Topic Two: RNG Pipeline Injection

- There is a need for coordinated group effort to address regulatory barriers (either from utilities or statute). Currently, most facilities acted individually when confronting decision-makers about the barriers being faced by biogas producers to engage in pipeline injection.
- There is [a federal rule on the books \(PURPA\)](#) that stipulates a requirement for electric utilities to at least provide avoided cost rates for distributed generation of

electricity from renewable sources. However, no such ruling exists for RNG producers.

- One of the primary goals of RNG pipeline injection stems from the access to the California market of [renewable identification numbers \(RIN\)](#) and [renewable energy certificates \(REC\)](#). If access to this and similar markets could be achieved, the economics for RNG production would be dramatically improved.
 - A suggestion was made to build a dedicated biogas pipeline system apart from the current natural gas distribution grid, or simply truck the gas over roadways, to transport the Wisconsin-made biogas to market. This was widely viewed as impractical.
 - The current business model and infrastructure of natural gas utilities is, in and of itself, a significant barrier. However, with enough scale, utilities may be inclined to seriously consider allowing the injection of a biogas resource.
 - A [study was conducted in neighboring Minnesota to assess the value of solar energy](#), why can't this be done for biogas in Wisconsin?! In addition, we know that biogas has helped the dairy industry grow, where is the study that talks about the total economic impact of the biogas industry?

Topic Three: Organizing the Wisconsin Biogas Industry

- The central question: How does the Wisconsin Biogas Industry amplify their voices to achieve the desired results in Madison?
- The industry needs to be able to produce an incentive or gather enough political pressure to influence policymakers (from state legislators to the Public Service Commission of Wisconsin) to alter current rules governing biogas resources.
 - This is the case from RNG pipeline injection to electricity generation to policy incentives for production of [compressed natural gas \(CNG\)](#) for vehicle fuel.

Topic Four: Wisconsin's Biogas Capacity

- Central question: what is the total biogas commodity size in Wisconsin, and what can be done with it? What is the potential size of this commodity if policies allowed the industry to continue to grow?
 - SEO's Wisconsin Biogas Survey partially answered this question. Biogas facilities produce more than 140MW of electricity capacity. While not gathered in the survey, specific information on the Btu output of facilities and the number of gasoline gallon equivalents on CNG produced can be tallied from available information.

- The per-cow biogas to electricity output is relatively well understood and indicates Wisconsin's fully realized manure-to-energy potential in the neighborhood of 1GW of electricity capacity.
- Again, where is the study that talks about the total economic impact of the biogas industry?

Topic Five: Nutrient Management

- While not fully explored, phosphorus (P) (and potentially future nitrogen) trading schemes may become necessary to address run-off issues for certain watersheds in Wisconsin. [New rules from the Department of Natural Resources \(DNR\)](#) are currently rolling out for P emissions from point-source emitters while some regions of the state are experiencing difficulty managing current nutrient levels in rivers and lakes. What role can biogas facilities play in improving nutrient management?

Action Items:

- 1. Commission a study to evaluate the total economic and environmental value of Wisconsin's biogas industry to be used when addressing policymakers.**
- 2. Formalize a Wisconsin Biogas Council to perform outreach to local communities and state policymakers to expand knowledge about the biogas industry and its positive impacts on the state and to reduce the regulatory, financial and policy barriers that are holding back further development.**