Biogas Policy Recommendations

Jennifer Green

November 27, 2013 at Queen’s Park, Ontario
Overview

- Introduction to Biogas Association
- FIT Program
- Feedstock Supply
- Innovation
- RNG and Transportation
- Summary
Biogas Association

• Biogas Association is a member driven association which represents all aspects of the biogas sector, promoting the development of biogas and anaerobic digestion.
Biogas in Ontario

Projects

Across Ontario, the majority of member projects so far have been in agricultural biogas, which fit seamlessly into many farming operations.

Choose a project description

CCS agriKomp

Carbon Control Systems (CCS) is a farm-based biogas system located in Millbrook, Ontario. The project consists of a 100 kW engine that is fueled using biogas collected from a 350-cow dairy farm in Colborne and a 3,700-cow dairy farm in Colborne. The biogas system can produce enough power to fuel over 100 homes and provides a carbon offset for electricity generated from the farm's feed herd and a local dairy herd. The CCS agriKomp provides complete planning, design, and installation of the project.
Biogas production creates a number of benefits but only electricity is currently valued in Ontario.

Anaerobic digestion destroys pathogens, methane and reduces odours, none of which are currently valued in Ontario.

CHP not currently supported through FIT.

Rural grid support, voltage regulation, power quality/support not valued.

Electricity is valued through FIT Program.

Renewable Natural Gas (RNG) injection

Biogas electricity generation avoids the use of fossil fuels.

Biogas production is a closed loop system that turns waste into fuel, fertilizer, destroys pathogens and GHGs.
Biogas Policy Recommendations

FIT
- Biogas set aside
- Biogas adders

Feedstock
- Organics policy
- Crop policy

RNG
- Gas grid
- Transportation
Biogas FIT Program

• 10% biogas capacity set aside and/or a biogas specific procurement window

• $0.08/kWh adder for crop residuals
Renewable Energy Solution

• WHY enhance FIT for biogas?
  – 320 MW of reliable, clean, green electricity
  – to incorporate more flexible electricity in supply-mix
  – to improve and support local and community energy needs
  – part of alternative policies to nuclear expansion
Feedstock for AD

• Policy development for:
  – organics diversion
  – crop residuals for energy production
Waste Management Solution

• WHY develop these policies?
  – to provide sustainable feedstock supply for AD
  – to reduce GHG emissions, protect water sources, recycle nutrients, manage odour
  – to create integrated networks for jobs and economic development
Innovation

• Support for innovation in the biogas sector

• WHY support biogas innovations?
  – to improve production and efficiencies for our climate and conditions
RNG and Transportation

• Municipal procurement for Renewable Natural Gas (RNG)
• Research and discussion for mandatory blend of RNG
  – For all natural gas distributors
  – CNG/LNG transportation fuel
• Tax exemptions for RNG use
• WHY RNG?
  – Can produce 3% of our natural gas demand
  – to create new markets
  – to reduce GHG emissions
Jobs

• Job creation is mostly in Ontario’s agricultural sector
  – Key industry to Ontario’s economy
• In Ontario, estimated potential (all biogas sources):
  – 6,720 construction jobs
  – Over 1,000 ongoing jobs
Policy Summary

- **FIT Programs**
  - A 10% Biogas Capacity Set Aside within future Feed-in Tariff procurements, and/or a technology specific procurement window
  - Introduction of an $0.08/kWh adder for crop residuals to facilitate rural economic development

- **Support for Feedstock Supply:**
  - Investigate legislative organics diversion from landfill in Ontario; integrate with Waste Reduction Strategy
  - Introduction of policies that support using crop residuals for energy production

- **Innovation Support:**
  - Support for innovation in the biogas sector, to improve production and efficiencies for our climate and conditions

- **RNG and Transportation:**
  - Wide-scale adoption of municipal procurement standards for RNG use in municipal vehicles
  - Research and discussions for a mandatory blend of RNG for all natural gas distributors in Canada, including CNG/LNG transportation fuel
  - Tax exemptions for RNG use
Next Steps

• Biogas Association to discuss the future of the sector with several government officials
  – Build on strong, existing relationships
  – Work with the Canadian Gas Association, which is finalizing their RNG Roadmap
  – Work with agriculture, food processors, compost and waste management organizations in Ontario
Acknowledgements
Biogas is reliable and flexible and offers beneficial solutions to energy and waste management in Ontario, while creating jobs and providing added value to the environment and our communities.
Thank You

Contact: Jennifer Green
Email: jgreen@biogasassociation.ca
Phone: (613) 822-1004
www.BiogasAssociation.ca