Supporting Renewable Natural Gas in Ontario

Value of Biogas EAST
March 22-23, 2018
Enbridge is an evolving energy company

- 4th largest company in Canada
- Operates the longest crude oil transportation system in the North America
- Operates Canada’s largest energy distribution companies: Enbridge Gas & Union Gas: serve consumer markets in Ontario, Quebec & New Brunswick and New York
- Canada’s second largest investor in renewables (wind, solar, hydroelectric, geothermal etc.)
Enbridge natural gas utilities in Ontario

Enbridge Gas Distribution (EGD) and Union (Union)

• More than 100 years of experience in safe and reliable service
• Dawn Storage Hub is Canada’s largest and one of the top-5 natural gas trading hubs in North America
• EGD and Union – 3.6M customers heating >75% of Ontario homes
• ~4,500 Ontario-based employees
Setting the stage for RNG

The Ontario Government, EGD, and Union support RNG development

- Climate Change Mitigation and Low-carbon Economy Act, 2016 ("Climate Change Act")

- Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap & Trade Activities (Sept 26, 2016)

- Collection of emission compliance costs included in natural gas bills effective January 1, 2017

- Ontario Government has communicated plans to invest $100 million to develop RNG in Ontario

- EGD and Union initiated an RNG RFP on February 23rd
RNG Synergies

RNG provides value for gas utilities, customers and Ontario

• Contribute to lowering greenhouse gas ("GHG") emissions associated with natural gas use in Ontario as the Province transitions toward a lower carbon economy

• Procure RNG as a low carbon alternative in EGD and Union’ gas supply portfolio

• Support the development of an RNG market within the Province of Ontario and facilitate access to natural gas distribution system

• Leverage existing valuable natural gas pipeline infrastructure to support transition to lower carbon economy

• Balance affordability, the environment and the economy for our ratepayers
Gas supply planning principles

These principles are central to gas supply procurement decisions

**Diversity**
- Inclusion of RNG in gas supply portfolio
- Potential for procurement from multiple biogas sources

**Reliability**
- Biogas/RNG production

**Flexibility**
- Contract term duration
- Communications between producers and utilities

**Prudent Cost**
- Government funding
- Cost neutral for customers
• Ratepayers have contributed to Cap and Trade funds
• Cap and Trade funds are dedicated to programs that reduce carbon emissions as defined in the CCAP
• Government funding will cover the cost difference between RNG and conventional natural gas supply
Connecting your RNG to the market

How RNG is connected depends on facility location

- Union offers connection service through a gas purchase agreement and M13 transportation service
- EGD will be offering a proposed Rate 400 upgrading service and a Rate 401 injection service
- Other services may be developed based on customer needs
Connecting your RNG to the market

Production to distribution

Biogas Production

Organic Material Decomposition
Landfill

Purification

Eliminating Impurities

Injection Station

Regulation, Measurement & Odorant

Enbridge

Union

Gas Distribution Pipeline
## The RFP process

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<tr>
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<th>Events</th>
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<tr>
<td>February 23</td>
<td>• Issue RFP</td>
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<tr>
<td>March 1</td>
<td>• Information Webinar</td>
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<tr>
<td>March 7</td>
<td>• Producers Submit Preliminary RFP Responses</td>
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<td>March 12</td>
<td>• Utilities Communicate Initial Screening Results</td>
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<td>March 29</td>
<td>• Producers Receive connection and service estimate</td>
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<td>April 12</td>
<td>• Producers Submit Final RFP Response</td>
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<td>May 1</td>
<td>• Utilities Award RNG Contracts</td>
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Questions?