

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

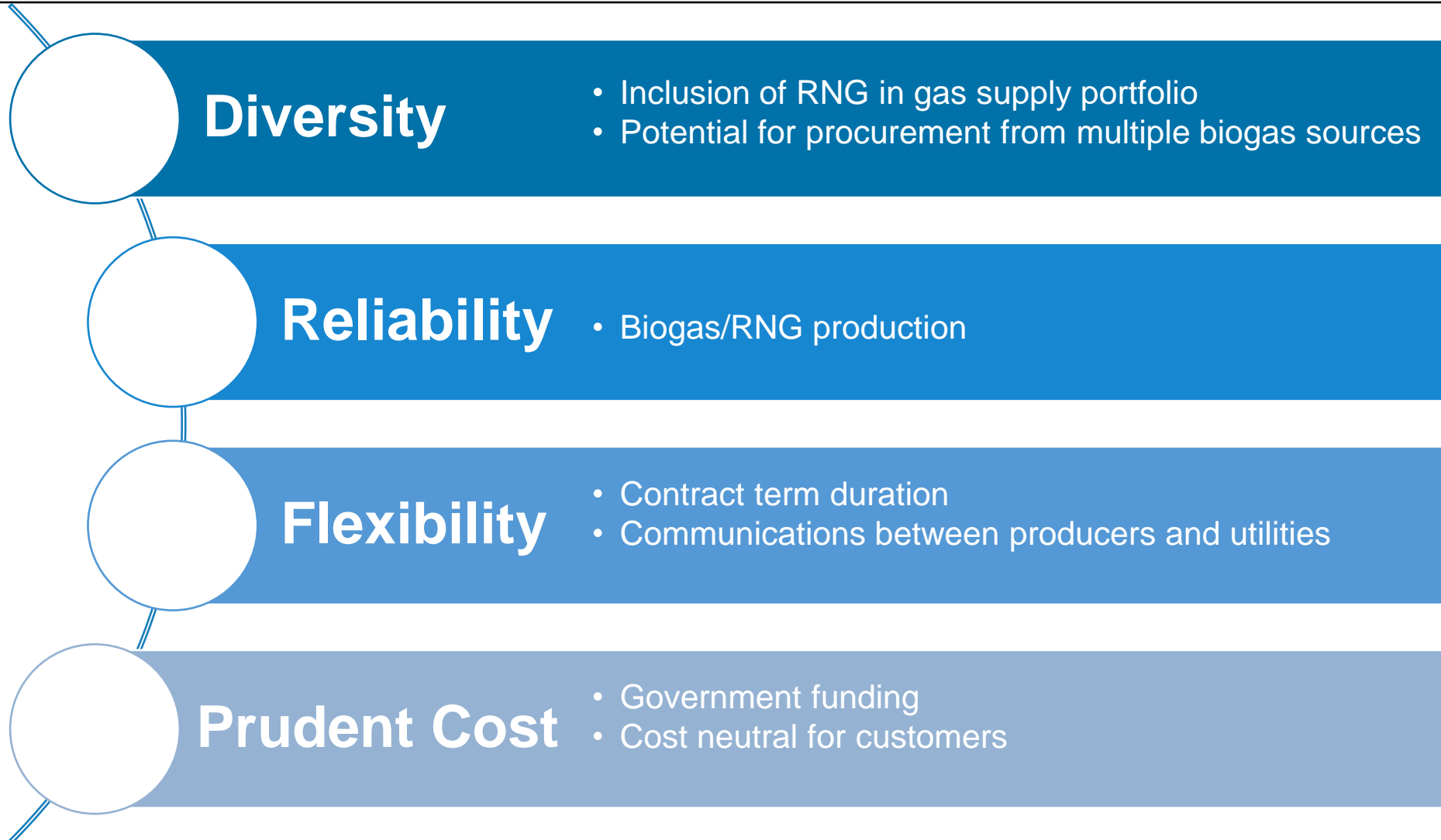
RNG provides value for gas utilities, customers and Ontario



- 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



Application of Ontario Government funding

Ontario Government funding will be used to manage Ratepayer impact

- 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

Illustrative Example Only

Total Cost of RNG - \$15	Cost of Conventional Natural Gas Supply	Forecast price of Conventional Supply - \$4.00/gj	Rate Payer Funded
	Aoided Cost of Carbon	2018 Forecast Carbon Price of \$18.00/tonne of CO2e - Carbon Cost Rate Impact - \$1.00/GJ	
	Premium for RNG Supply	Funding - \$10.00	Province Funded

Connecting your RNG to the market

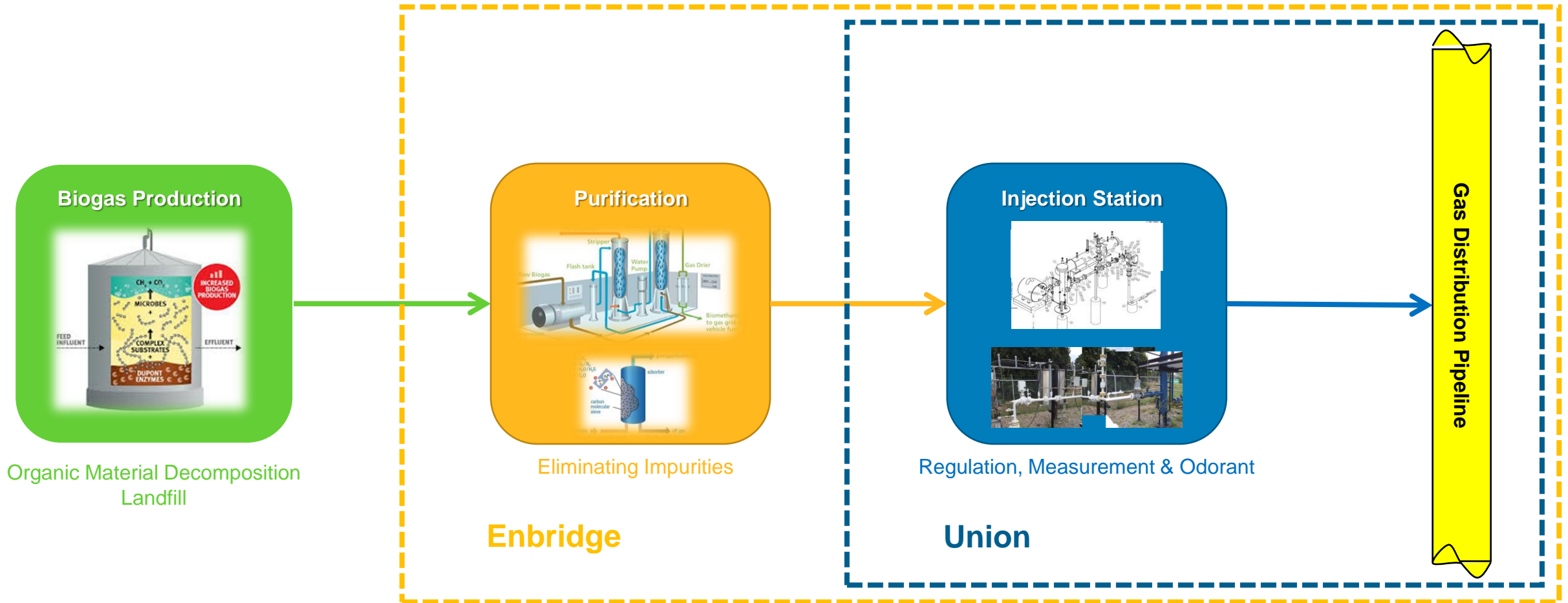
How RNG is connected depends on facility location

- 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

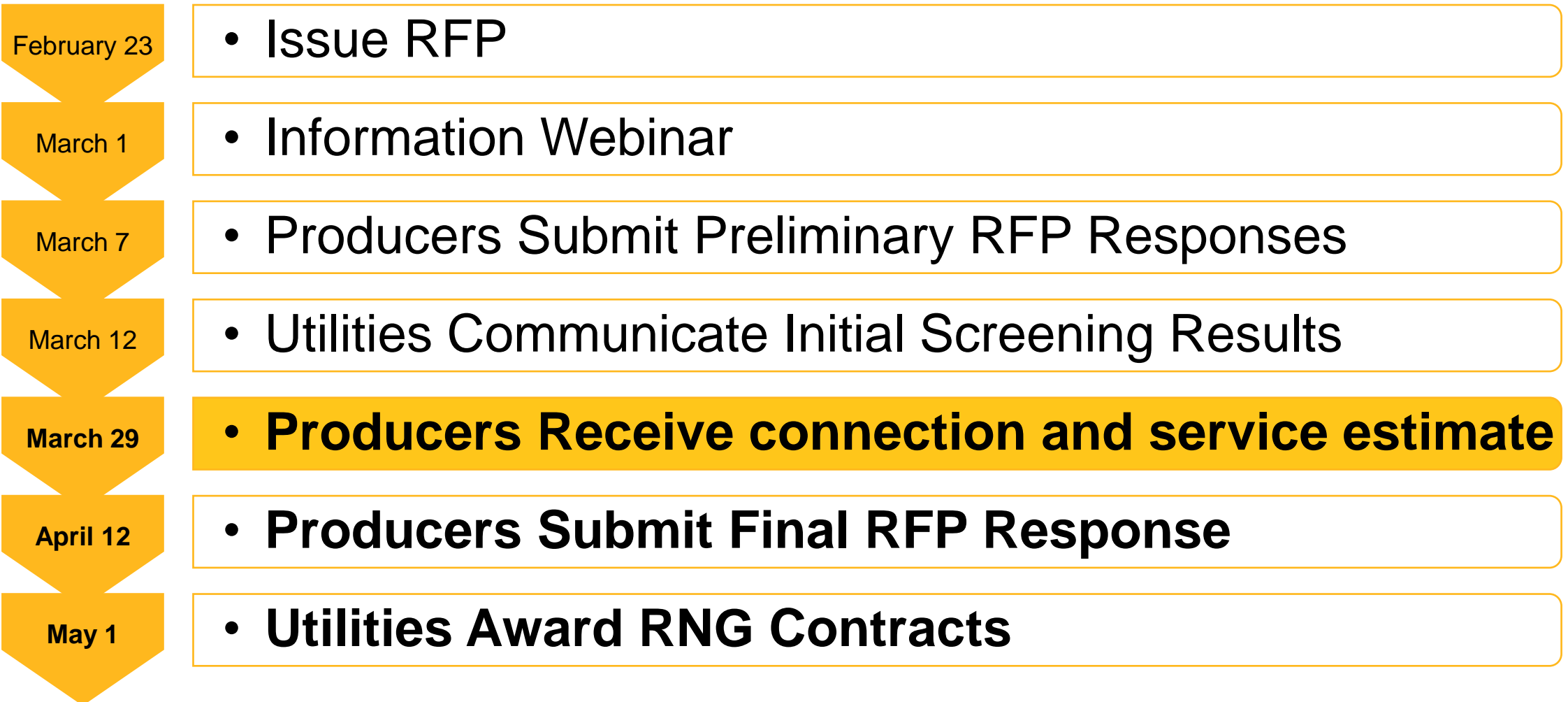


Connecting your RNG to the market

Production to distribution



The RFP process



Questions?

