

Customer Webinar: Distribution In-Franchise Sales



June 2, 2021



Agenda



Agenda item	Speaker
Welcome & Logistics	Julie Alexander, Account Manager
Safety Moment – Dig Safe	Lewis Oatway, Account Manager
Opening Remarks	Cynthia Hansen, EVP & President, Gas Distribution & Storage, Enbridge Inc.
Operations Update	Clancy O'Hara, Director, Gas Control & Management
Regulatory Update & Timelines	Amy Mikhaila, Manager, Rates
Service Harmonization	Ryan Organ, Manager, Policy & Sales Support
Welcome to Enerline	Kristen Pillon, Supervisor, Business Applications
Carbon Pricing Update	Jennifer Murphy, Supervisor, Carbon Strategy
Energy Transition	Scott Dodd, Director, Business Development
Q & A	Andy Duquette, Specialist, Power Markets
Closing Remarks	Tanya Mushynski, VP Customer Care

Safety moment

Dig safely: It's the law

- Underground natural gas pipelines may be closer to the surface than you think
- Digging in the wrong place, even with a simple garden shovel, could create a safety hazard or cut off service to an entire neighbourhood
- You could be held liable for all of it
- Locate underground utility lines before you do any digging on your property



But won't my contractor take care of this?
Some contractors can, but it's best to ask and ensure that safety is the top priority

What do you need to do before you dig?



1

Find out what's underground – IT'S FREE

A minimum of five days before digging, visit www.ontarioonecall.ca or call 1-800-400-2255 and make a request to know where natural gas lines are buried and where to avoid digging



2

Wait for the locators to arrive

Once your request is received, Enbridge Gas or a designated locate service provider(s) will visit your home and locate the underground utilities so you can complete your project safely

Visit www.ontarioonecall.ca or call 1-800-400-2255

What do you need to do before you dig?



3

Now you can dig

Damage to natural gas lines can result in a leak, fire, explosion, or cut off utility service to an entire neighborhood

Homeowners and/or their contractors who cause damage can be fined, charged for costly repairs to equipment or neighbouring property, or even face legal action if someone is injured

Visit www.ontarioonecall.ca or call 1-800-400-2255

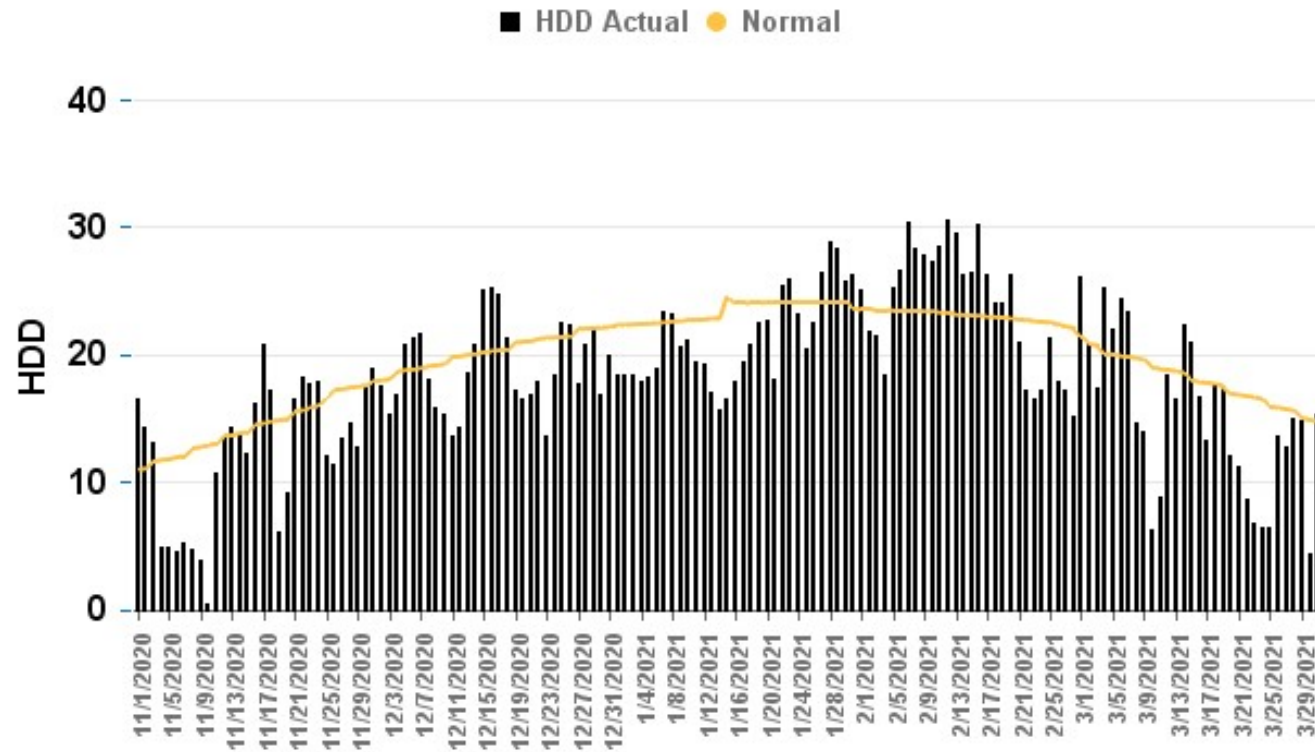
Opening remarks



Cynthia Hansen
EVP & President, Gas Distribution & Storage, Enbridge Inc.

Operations update

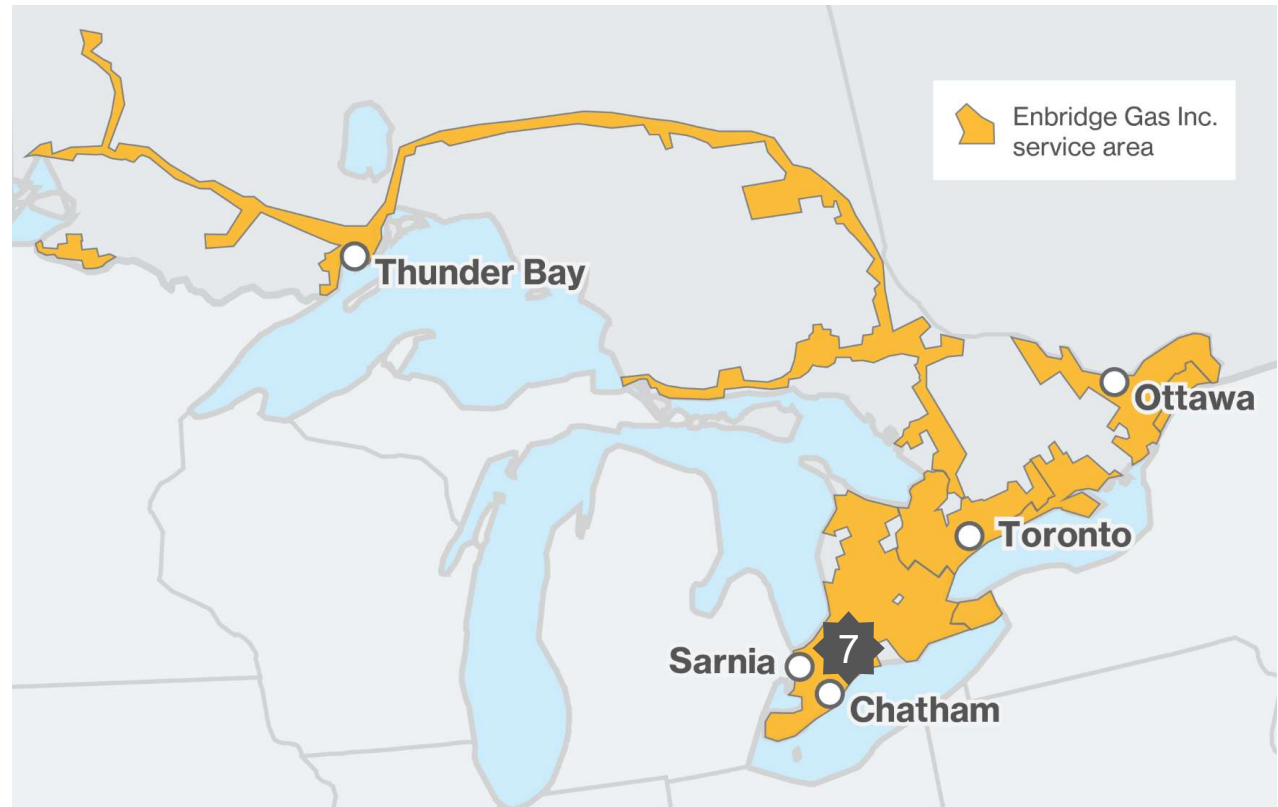
Winter recap: 2020 – 2021 daily HDDs



Sustained cold occurred only in early February

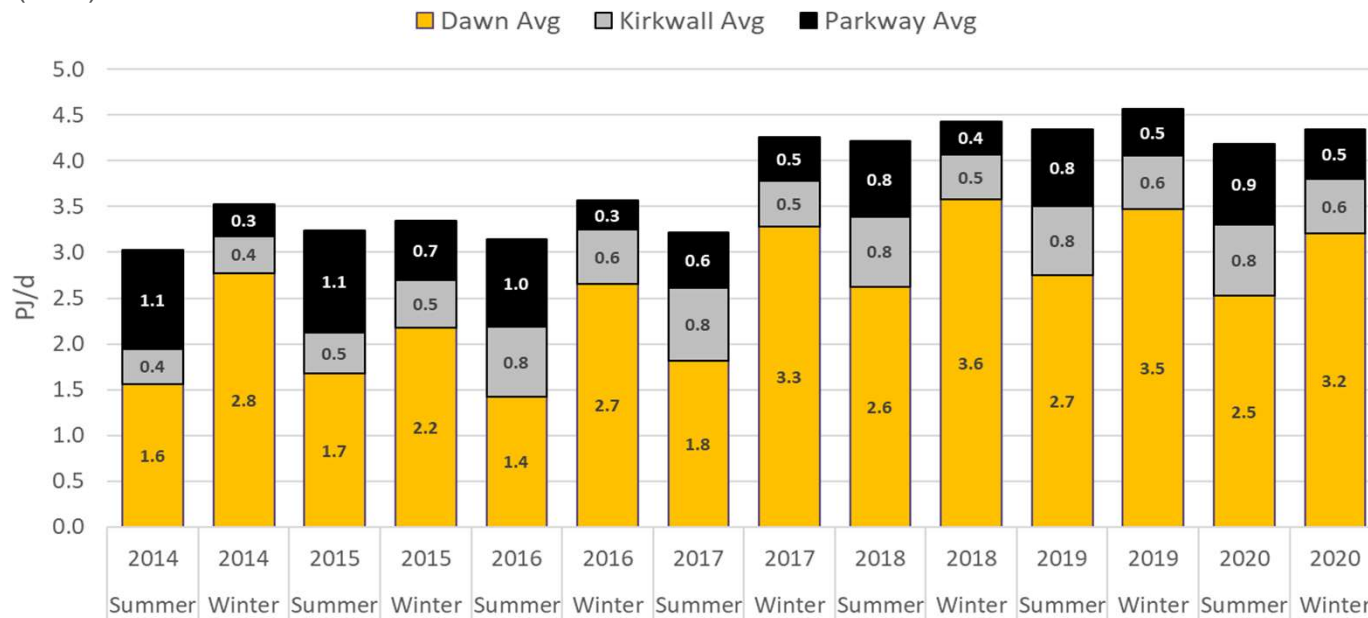
Customer interruptions

1. **Jan 19** – One customer, pipeline maintenance
2. **Jan 28** – One customer, Weather: system capacity
3. **Feb 4** – One customer, Weather: system capacity
4. **Feb 4** – Two customers, pipeline maintenance
5. **Feb 7** – One customer, Weather: system capacity
6. **Feb 16** – Two customers, pipeline maintenance
7. **Feb 21** – One customer, Weather: system capacity



Supplies

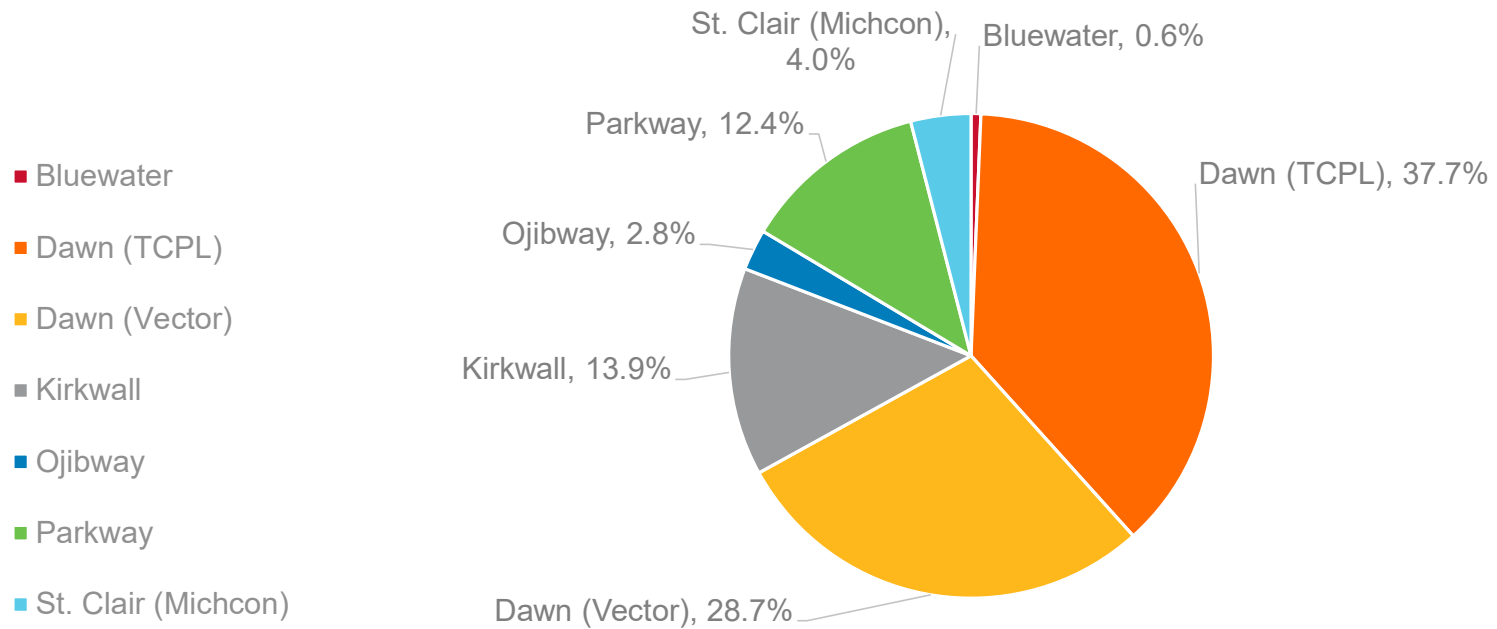
Average Receipts (PJ/d)



Dawn receipts down 0.3 PJ/d from W19-20

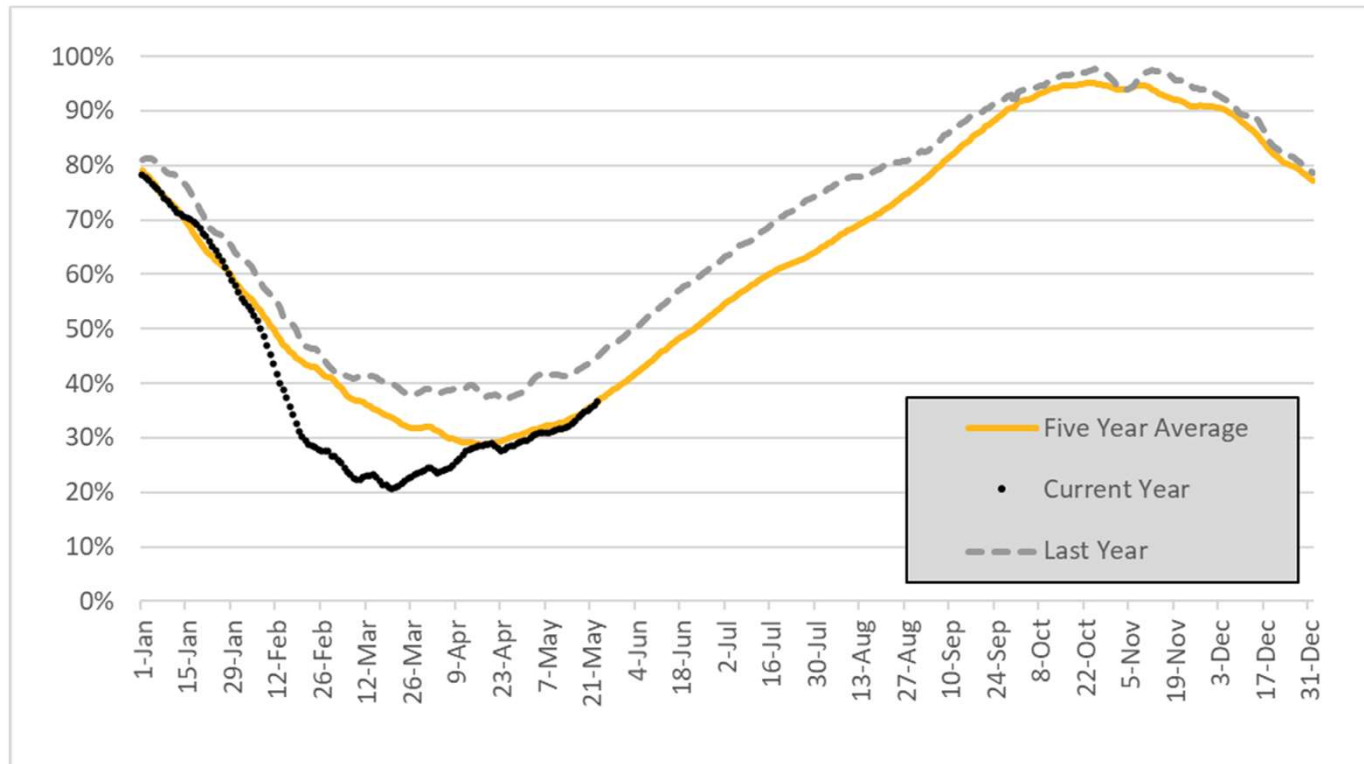
Supplies

Pipeline receipts



Continued diversity in supply

Storage: percentage full



25% of inventory withdrawn Feb 2 – 20

Top 10 storage withdrawal days



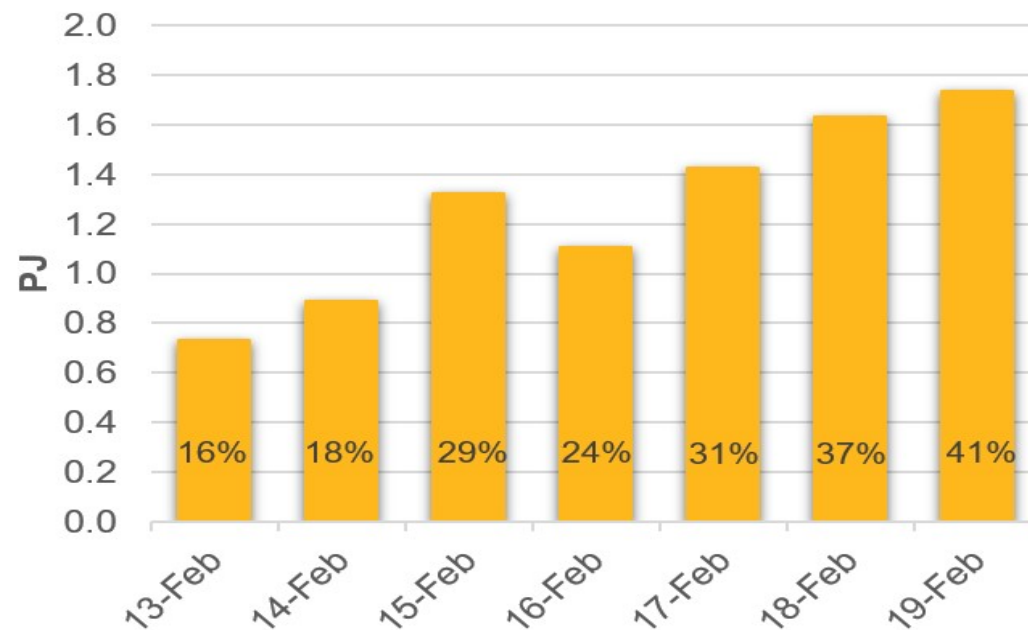
Rank	Date	Withdrawals (TJ)	Percent Full
1	01/30/19	-6,286	50.7%
2	02/12/21	-5,919	41.7%
3	02/11/21	-5,532	43.6%
4	01/01/18	-5,382	69.2%
5	01/31/19	-5,360	48.9%
6	01/02/18	-5,267	67.5%
7	01/07/15	-5,258	73.5%
8	01/29/19	-5,235	52.7%
9	02/10/21	-5,199	45.4%
10	12/28/17	-5,066	75.6%

Three new entrants in Top 10

Value of Dawn

- Storage
 - Traffic light turned to yellow Feb.12.
 - Interruptible service scheduling reductions started Feb.13 and ended Feb. 22.
- Transportation
 - No impact on Dawn to Parkway activity.

Interruptible storage served



9 PJs of interruptible withdrawals during the height of the polar vortex

Regulatory update

2019 – 2023 Price Cap Framework



Price Cap Framework

- Deferred rebasing period of five years
 - Cost of service rebasing application to be filed for 2024 rates
- Earnings sharing mechanism
- Maintain existing rate structures and rate zones until rebasing
- Annual rate adjustments based on a Price Cap framework
- Incremental Capital Module (ICM) available for funding of major qualifying capital projects

Annual Rate Adjustment Formula

$$= (I - X - S) \pm Y \pm Z + \text{ICM}$$

Where rates are a function of:

- I = An inflation factor
- X = A zero Productivity factor
- S = A 0.3% Stretch factor
- Y = Certain predetermined pass-through adjustments (gas supply costs, DSM)
- Z = Certain non-routine adjustments
- ICM = Incremental Capital Module rate riders

2021 Rates adjustment



- 2021 Rates application was bifurcated into two phases
- Phase 1 updated rates for the price cap mechanism (PCI)
 - implemented January 1, 2021
- Phase 2 updated rates for approved incremental capital module projects (ICM)
 - to be implemented July 1, 2021

Rate Zone	Rate Class	Direct Purchase Bill Impacts*			Total Bill* (incl Gas Costs)
		Phase 1 (PCI)	Phase 2 (ICM)	Total	
EGD	100	1.1%	-	1.1%	0.8%
	110	0.4%	-	0.4%	0.2%
	115	-0.1%	-	-0.1%	-0.4%
	135	0.6%	-	0.6%	0.3%
	145	22.1%	-	22.1%	11.2%
	170	-0.2%	-	-0.2%	-0.1%
Union South	M4	5.7%	1.4%	7.1%	1.5%
	M5	6.4%	0.0%	6.4%	0.9%
	M7	-1.9%	2.0%	0.1%	0.0%
	M9	3.9%	3.3%	7.2%	1.3%
	T1	0.6%	2.1%	2.7%	0.4%
	T2	0.0%	4.1%	4.1%	0.3%
	T3	1.7%	4.2%	5.9%	0.9%
Union North	20	2.1%	-	2.1%	0.4%
	100	1.5%	-	1.5%	0.1%
	25	1.9%	-	1.9%	0.4%

2019 Deferrals and earnings sharing unit rates



- Approved for disposition with July 2021 bills
- Enbridge Gas did not have earnings sharing in 2019
- Unit rates can be applied to volumes consumed in 2019 to determine the total disposition amount

* Gas supply unit rates may also be applicable to Union rate zone customers

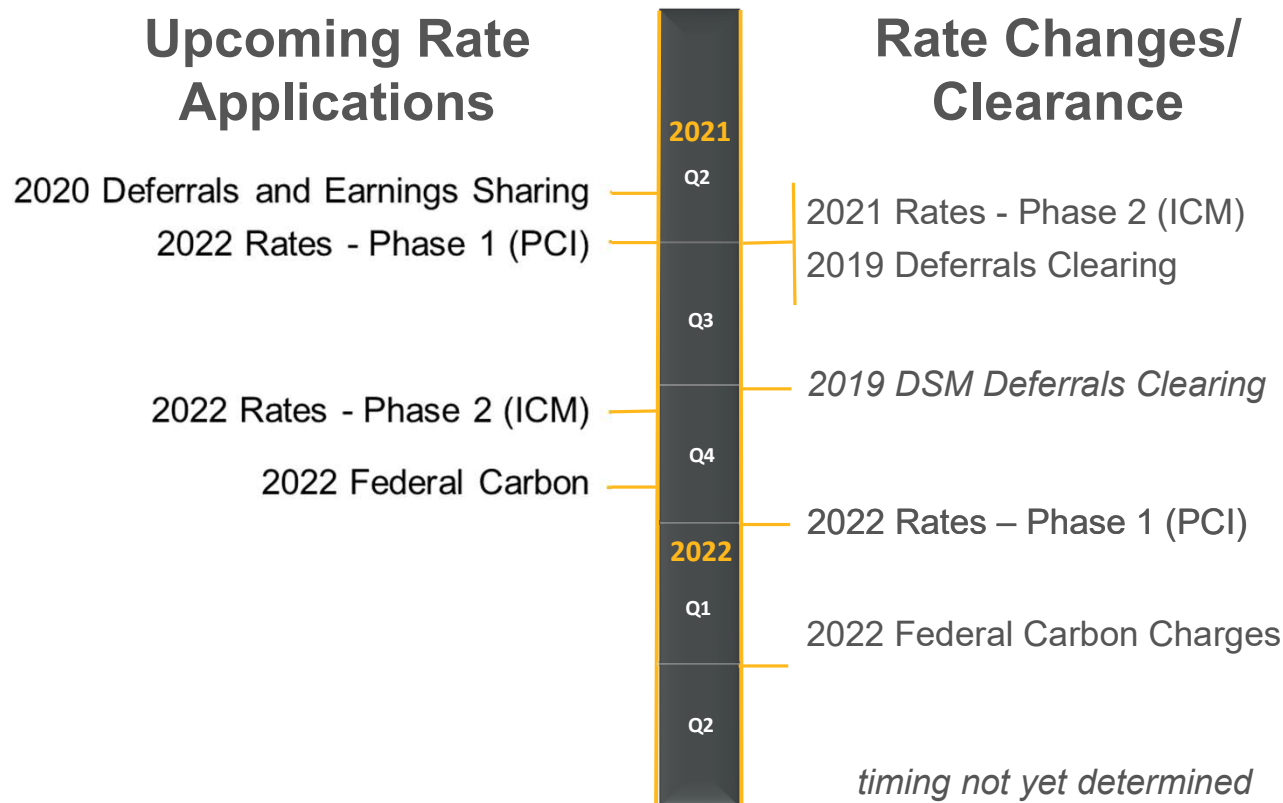
Rate Zone	Rate Class	System/ Western-T (cents/m ³)	Ontario-T/ Dawn-T (cents/m ³)
EGD	100	0.0250	0.0235
	110	0.0581	0.0566
	115	0.0617	0.0602
	135	0.0616	0.0601
	145	0.0570	0.0555
	170	0.0694	0.0679
		Delivery (cents/m ³)	
Union South*	M4	(0.0145)	
	M5	(0.2361)	
	M7	0.0038	
	M9	0.0072	
	T1	(0.0316)	
	T2	(0.0090)	
	T3	(0.0021)	
Union North*	20	(0.0437)	
	100	(0.0210)	
	25	(0.0623)	

2019 DSM deferrals unit rates

- Application filed March 10, 2021
- Nearing the end of the procedural steps before the OEB issues a decision
- Preliminary unit rates can be applied to volumes consumed in 2019 to estimate the total disposition amount

Rate Zone	Rate Class	Preliminary DSM-Related (cents/m ³)
EGD	100	2.4205
	110	(0.0911)
	115	(0.0827)
	135	0.0789
	145	(4.8938)
	170	(0.6557)
Union South	M4	0.2297
	M5	0.2615
	M7	0.3908
	M9	-
	T1	(0.1543)
	T2	(0.0149)
	T3	-
Union North	20	(0.0891)
	100	(0.0398)
	25	-

Regulatory outlook



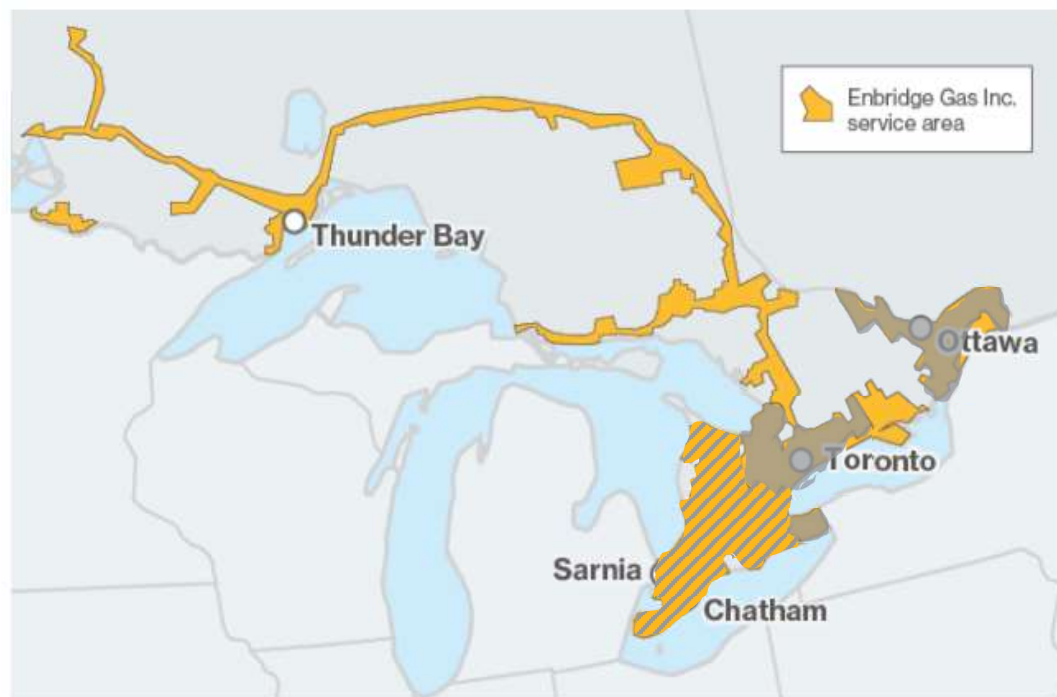
Other

- QRAM applications filed each quarter for gas cost rates effective Jan 1, April 1, July 1 and Oct 1
- 2020 DSM Deferrals
- 2022-2027 DSM Framework

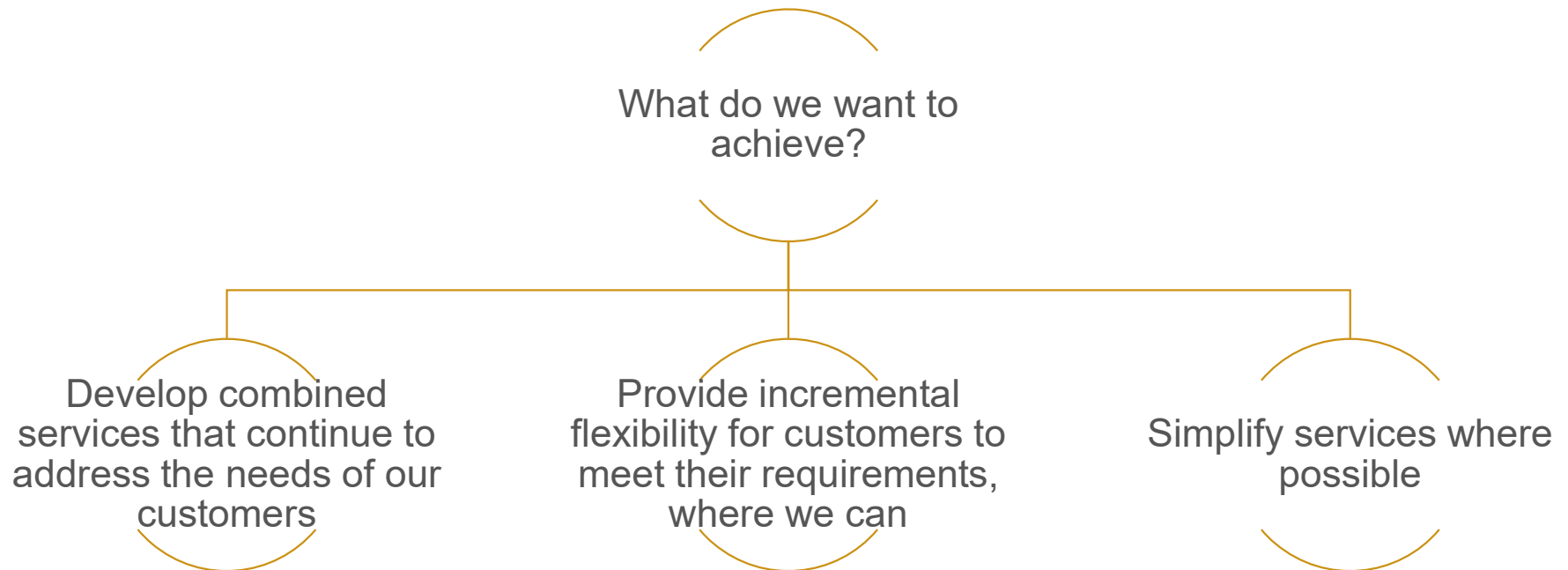
Service harmonization

Service harmonization

- What is service harmonization?
 - The legacy utilities have different services across all three rate zones
 - As we approach the 2024 rebasing proceeding, EGI is working on a proposal for what the combined suite of services will look like



Service harmonization



Where are we in the process?

- We are at the beginning of the process and are gathering input from our customers
- We invited a representative subset of our contract rate distribution customers and energy marketers to engage in one-on-one conversations
- Opportunity to understand their priorities and preferences
- Using the customer feedback as we develop our initial proposals

What's next?



Working to develop
initial proposals for
harmonized
services

Develop refined
proposals in
consideration of
feedback

Will conduct
broader customer
engagement

- More details to come

Ultimately,
proposals will be
filed with the
Ontario Energy
Board late in 2022
as part of the 2024
rebasings
application

Welcome to Enerline



Kristen Pillon
Supervisor, Business Applications

Enerline

New name, same experience

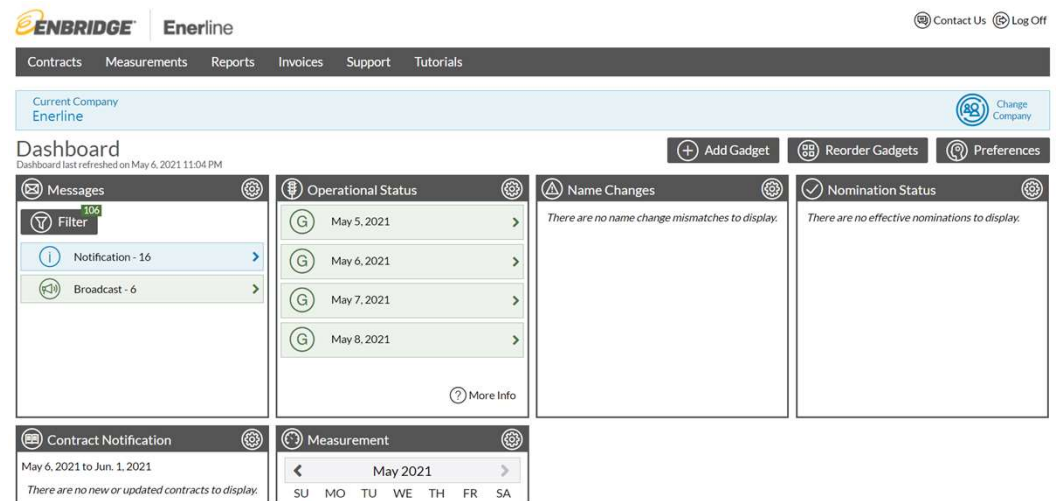
A screenshot of the Enerline login page. The page has a white background with a thin orange border. In the top left corner, there is the ENBRIDGE logo followed by the word 'Enerline'. In the top right corner, there is a 'Contact Us' link with a speech bubble icon. The main content area contains a login form with the following elements: a 'Username' label above a text input field; a checkbox labeled 'Remember username'; a 'Password' label above a text input field; an orange 'Sign In' button with a right-pointing arrow icon; and three links below the button: 'Forgot password', 'Register', and 'Not sure if you're an Enerline customer?'.

Bringing Unionline into the Enbridge Gas brand family

Enerline



- New look and name
 - New URL: enerline.enbridgegas.com
- New Enerline Support email
 - Enerline@enbridge.com
- All of what our customers love
 - Same navigation and functionality



New enbridgegas.com – landing page



Smell Gas? Call 1-866-763-5427

[About Enbridge Gas](#)

[Careers](#)

[Sign In](#)

Q A A



Residential

Business & Industrial

Storage &

Sustainability

My Account

Enerline

GetConnected

COVID-19 Energy Assistance Program (CEAP)

The Ontario Energy Board has launched the COVID-19 Energy Assistance Program to help residential, small business and registered charity customers with their Enbridge Gas bill. See if you qualify for a one-time credit.

[Learn more](#)

Sign in to My Account

Register today to start managing your account online

[Sign In](#)

[Register Now](#)

New enbridgegas.com – Business home page



Smell Gas? Call 1-866-763-5427

About Enbridge GasCareersSign In

ResidentialBusiness & IndustrialStorage & TransportationSustainability

Important notice about your rates

On July 1, your rates will be changing and understand what this means for you.

Contact us today

Sign in to...

Select...

I would like to

[View bill & gas usage](#)

[How to pay your bill](#)

[Submit a meter reading](#)

[Find rebates & ways to save energy](#)

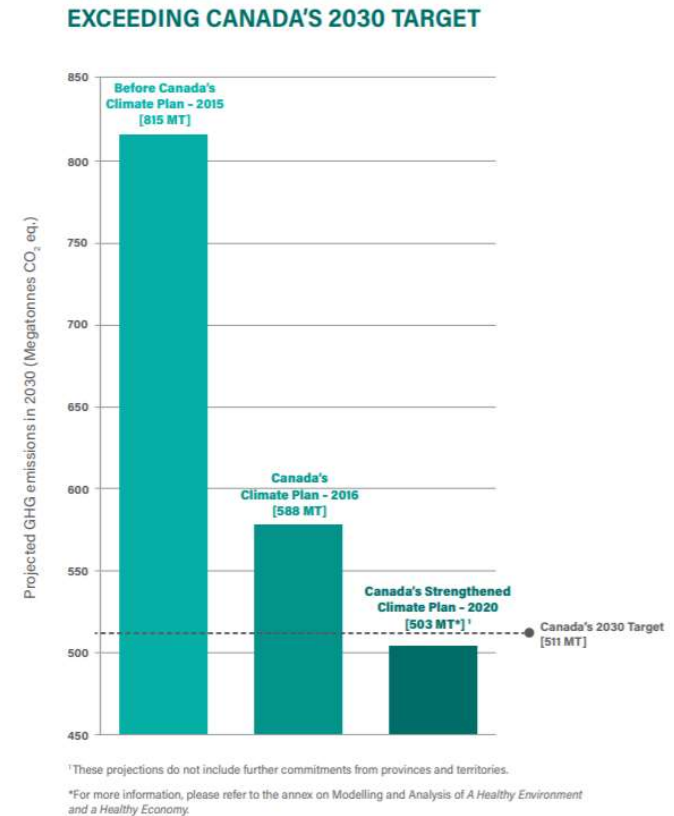
[Register for eBill](#)

[Move my service or create a new account](#)

Carbon pricing update

Update on federal climate policy

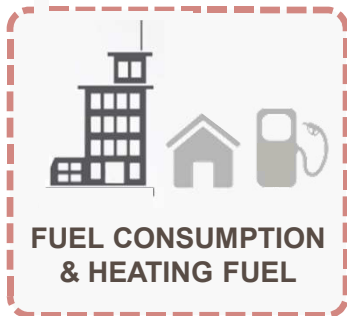
- Federal government released an updated climate plan in Dec 2020, which builds on the 2016 climate plan
- Includes new GHG reduction targets
 - New target of 40-45% reduction over 2005 by 2030
 - Net zero emissions by 2050
- Included announcements regarding
 - Carbon pricing
 - Clean fuel regulations
 - Border carbon adjustments
 - Funding for GHG reduction activities



Source: ECCC – “A Healthy Environment and A Healthy Economy – Canada’s strengthened climate plan to create jobs and support people, communities and the planet”

Federal carbon pricing

- Federal carbon pricing program is implemented in provinces/territories that do not have their own carbon pricing program in place and has two elements:



Carbon charge on fossil fuels

- Generally payable by fuel producers or distributors
- Carbon charge is currently 7.83¢/m³ on natural gas, based on \$40/tCO₂e
- Eligible greenhouse operators receive 80% relief from the carbon charge



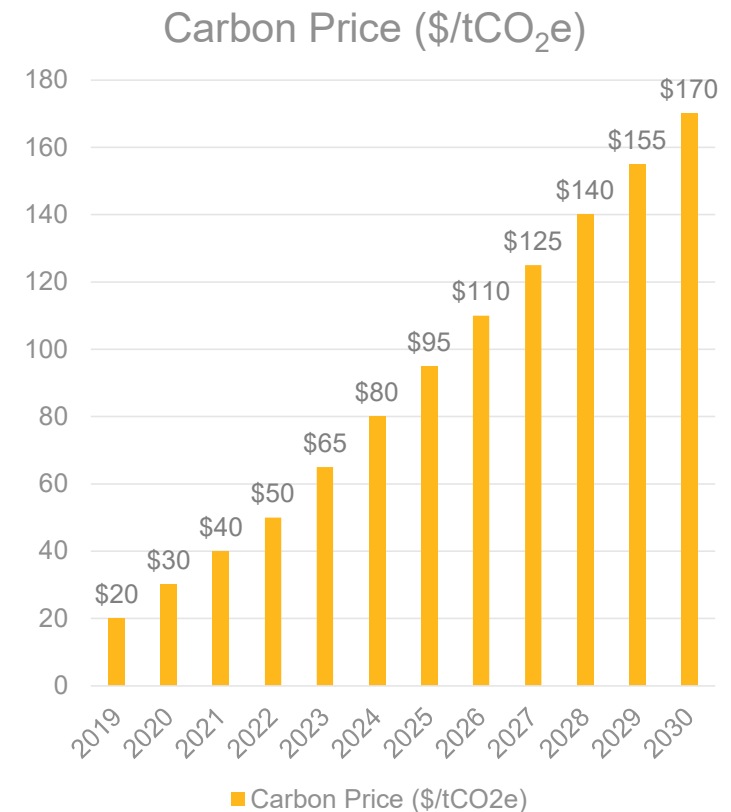
Output-Based Pricing System (OBPS) for large facilities

- Facilities that emit >50 ktCO₂e/yr **and** undertake an activity with an Output-Based Standard (OBS). Facilities between 10 to 50 ktCO₂e/yr may voluntarily participate.
- Compliance through paying excess emissions charge (\$40/tCO₂e in 2021), buying surplus credits from other participants, or offset credits

Federal carbon pricing update



- Carbon price escalating
 - \$10/tCO₂e per year until 2022
 - \$15/tCO₂e starting in 2023, reaching \$170/tonne by 2030
- Fuel charge rates post-2022 have not been announced, however Enbridge estimates that a carbon price of \$170/tCO₂e will equal approximately 33 ¢/m³ of natural gas



Output-Based Pricing System updates

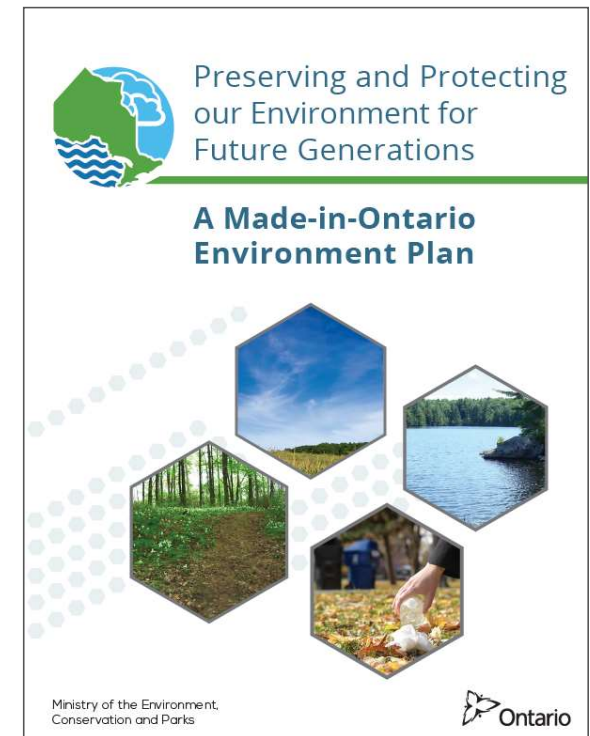


- Environment and Climate Change Canada (ECCC) has begun review of Output-Based Pricing System (OBPS) post-2022, including
 - Exploring options to increase emission reductions from OBPS
 - Adding additional Output-Based Standards (OBS) for 15 activities not currently covered
 - Reviewing the current OBS for specific sectors
 - Exploring opportunities to reduce administrative burden
- ECCC plans to engage on these topics in winter 2021, final post-2022 regulations to come into force in 2023
- Federal offset regulation anticipated in late 2021
- Call for proposals to access funds collected through OBPS anticipated in fall 2021/winter 2022

Ontario Emissions Performance Standards



- Ontario Ministry of Environment, Conservation and Parks (MECP) is implementing an industrial Emission Performance Standards (EPS) to replace OBPS starting Jan 1, 2022
- Similar to the OBPS:
 - The EPS regulates GHG emissions from large industrial facilities by setting an emissions standard facilities must meet each year
 - A facility will be responsible for paying to cover the portion of its emissions that exceed the standard
- Sectoral coverage same as OBPS
- Anticipate that most entities covered under EPS will have a lower compliance obligation than under OBPS



Ontario Emissions Performance Standards



- On May 27th, MECP released draft EPS amendments that propose additional measures to support the transition from OBPS to EPS (ERO # 019-3719)
- Proposed changes to 2 regulations:
 - O.Reg 241/19 – Greenhouse Gas Emissions Performance Standards
 - O.Reg 390/18 – Greenhouse Gas Emissions: Quantification, Reporting & Verification
- Proposed amendments:
 - Clarify certain compliance and reporting requirements
 - Support the administration and enforcement of EPS program
 - Reduce administrative burden
- MECP accepting comments until Jul 11, 2021
- Enbridge is working with the MECP to understand the transition process and will provide further details once available

Clean Fuel Regulation

- Clean Fuel Regulation (CFR) is a market driven regulation aimed at lowering the carbon intensity (CI) of liquid fuels over time through:
 - Lowering emissions in the production, transportation and distribution of fuels
 - Incorporating lower carbon fuels
 - Switching to alternative transportation fuels (CNG, electric vehicles)
- Updated federal climate plan in Dec 2020 removed gaseous and solid fuels from the CFR, which now focuses only on liquid fuels in the transportation sector
- Credit generation can begin when final regulation is published, anticipated Dec 2021 and reduction requirements come in 1 year later

Energy transition

Bringing lower-carbon solutions to scale

It begins with leadership from the top



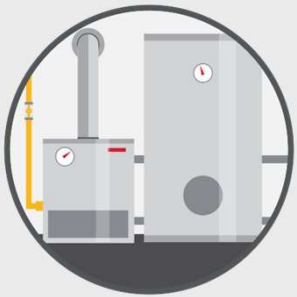
“I believe Enbridge is uniquely positioned to help bring new lower-carbon solutions to scale in both Canada and the U.S. while continuing to meet the demand for safe, reliable and affordable energy.”

Al Monaco, CEO Enbridge Inc.

Enbridge's CSR & Sustainability Report, 2018 Update

Enbridge Gas – Part of a lower carbon future

Less gas



- Hybrid heating – dual fuel space heating
- Natural Gas heat pumps
- District Energy Systems
- Energy Conservation Programs

Replacement



- Replacing oil, propane and wood for home and water heating

Carbon neutral gas



- Hydrogen: Power to Gas
- Renewable Natural Gas

Solutions other than gas



- Geothermal Heat Pumps for heating and cooling
- MicroGeneration: Low grade heat waste recovery
- Carbon capture utilization and storage
- Battery storage



**Net
zero
emissions**

Eliminate GHG emissions from our business on a net basis (net zero) by 2050



Reduce the intensity of GHG emissions from our operations 35% by 2030

A leader in renewable energy

Focus: energy efficiency

Low carbon technology alternatives – GHP / HH

Heat pump: HVAC equipment that extracts heat from a heat source (e.g., outdoor air, ground) and delivers it to a heat sink (space heating and/or domestic water heating)

- In a GHP, the electric compressor is replaced with either a natural gas engine driven or thermal compressor that uses the heat produced by natural gas

Product commercialization status: Commercial sector ready now; product for residential sector anticipated in 2023

Key benefits:

- An alternative to electrification that can be used for both space and domestic hot water heating with efficiencies greater than 100%
- 20% - 40% reduction in GHG emissions and energy costs as compared to a furnace



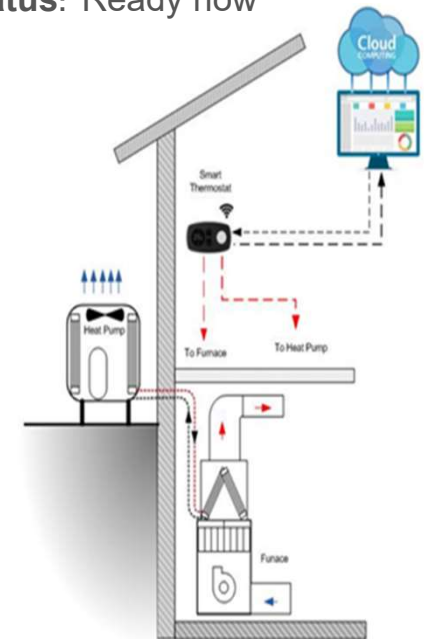
Hybrid heating: System that has multiple heating devices using different fuel sources. The system uses the most efficient equipment at the time of use based on utility prices, grid emissions and individual equipment performance

- Can combine gas furnace or combo-system with an electric heat pump (vs. Air Conditioner)

System commercialization status: Ready now

Key benefits:

- Reduced energy costs while maintaining customer choice and ensuring resiliency with ability to achieve efficiencies greater than 100%
- 20 - 50%* reduction in GHG emissions when switching from a purely fossil-fuel-burning system



*Depends on the fuel switching optimization goals which could be cost or GHG saving.

A leader in renewable energy

Focus: renewable natural gas

RNG - Overview

Unlike fossil fuels, RNG is created from:

①

Waste recovery

Organic waste, such as wastewater treatment sludge, food waste or manure is delivered to a biodigester.



Food processing organic waste



Agricultural waste, such as leftover crops and animal manure



Bio-solids from wastewater treatment plants

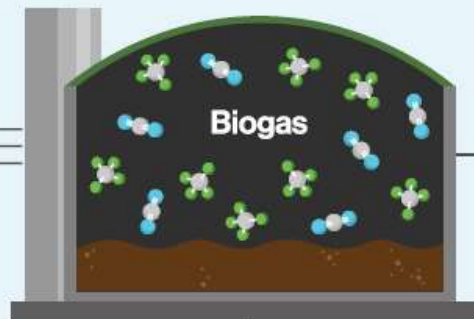


Landfills

②

Anaerobic digestion

The biodigester breaks down the organic waste, creating biogas. The byproduct of anaerobic digestion, digestate, can be converted into fertilizers that return nutrients back to the soil.



③

Upgrading

- The biogas is cleaned to meet gas quality specifications.
- Landfill gas is captured and sent directly for upgrading.



④

Added to system

The resulting RNG is added to the existing natural gas infrastructure to be sold and distributed to customers—either directly into the pipeline or to fuel the producer's own needs.



If we harness only **10%** of Canada's potential, RNG can help heat up to **one million homes for one year.***



Homes and businesses



Fuel fleets



Byproduct / digestate



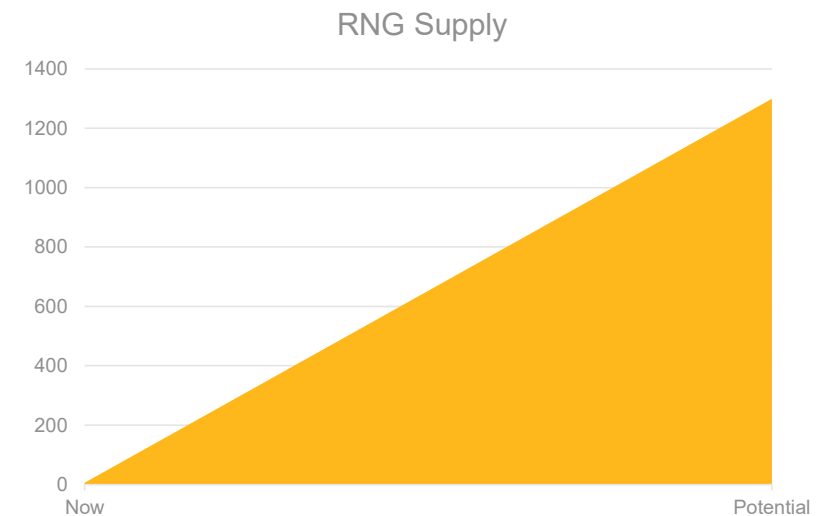
Fertilize soil

Canadian RNG market potential



Current Production	Future Potential*
>7 PJ/y	~1300 PJ/y
6.5 Bcf	1200 Bcf

- Policy drivers:
 - Ontario's 2020 Food and Waste Policy
 - Federal Carbon Charge
 - Federal Clean Fuels Standard



Ontario & Quebec have about 40% of the Canadian RNG opportunity

Enbridge Gas regulatory enablement



RNG Enabling Program

- EB-2017-0319
- Utility RNG investment approval

Voluntary RNG Program

- EB-2020-0066
- Customer voluntary RNG supply
- Opt-Up



Understanding the regulated environment at all levels

Success stories



Toronto
AD
315k GJ



Niagara
Landfill
800k GJ



London
AD
120k GJ



Hamilton
WWTP
100k GJ

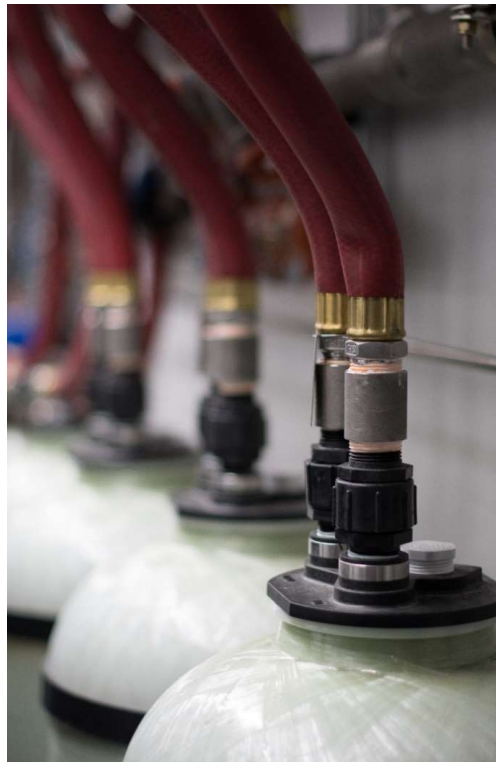
Valued partnerships

A leader in renewable energy

Focus: renewable hydrogen

Types of hydrogen

Brown — Grey — **Blue** — Green



Brown hydrogen

Hydrogen made from coal gasification

Grey hydrogen

Hydrogen produced from natural gas using Steam Methane Reforming (SMR)

Blue hydrogen

This is Grey Hydrogen with Carbon, Capture and Sequestration (CCS)

Green hydrogen

This is hydrogen produced from electrolysis using clean electrical energy such as wind solar or the Ontario electricity grid and other green sources

Fact: For every one tonne of hydrogen produced by the SMR process, approximately 12 tonnes of CO₂ is produced

About hydrogen



- Odourless and nontoxic, very light (14 times lighter than air), nonpoisonous, most abundant element
- Highest energy content of common fuels by weight, nearly three times that of gasoline
- Conversely, lowest energy content by volume (about four times less than gasoline)
- Like electricity, hydrogen is an “energy carrier”
- Can be converted to electricity by a fuel cell, unlike batteries, fuel cells operate continuously in the presence of hydrogen and oxygen (in ambient air) with no state of charge concerns
- Like gasoline or natural gas, hydrogen is a fuel that must be handled properly. It can be used as safely as other common fuels when simple guidelines are followed

Hydrogen: use

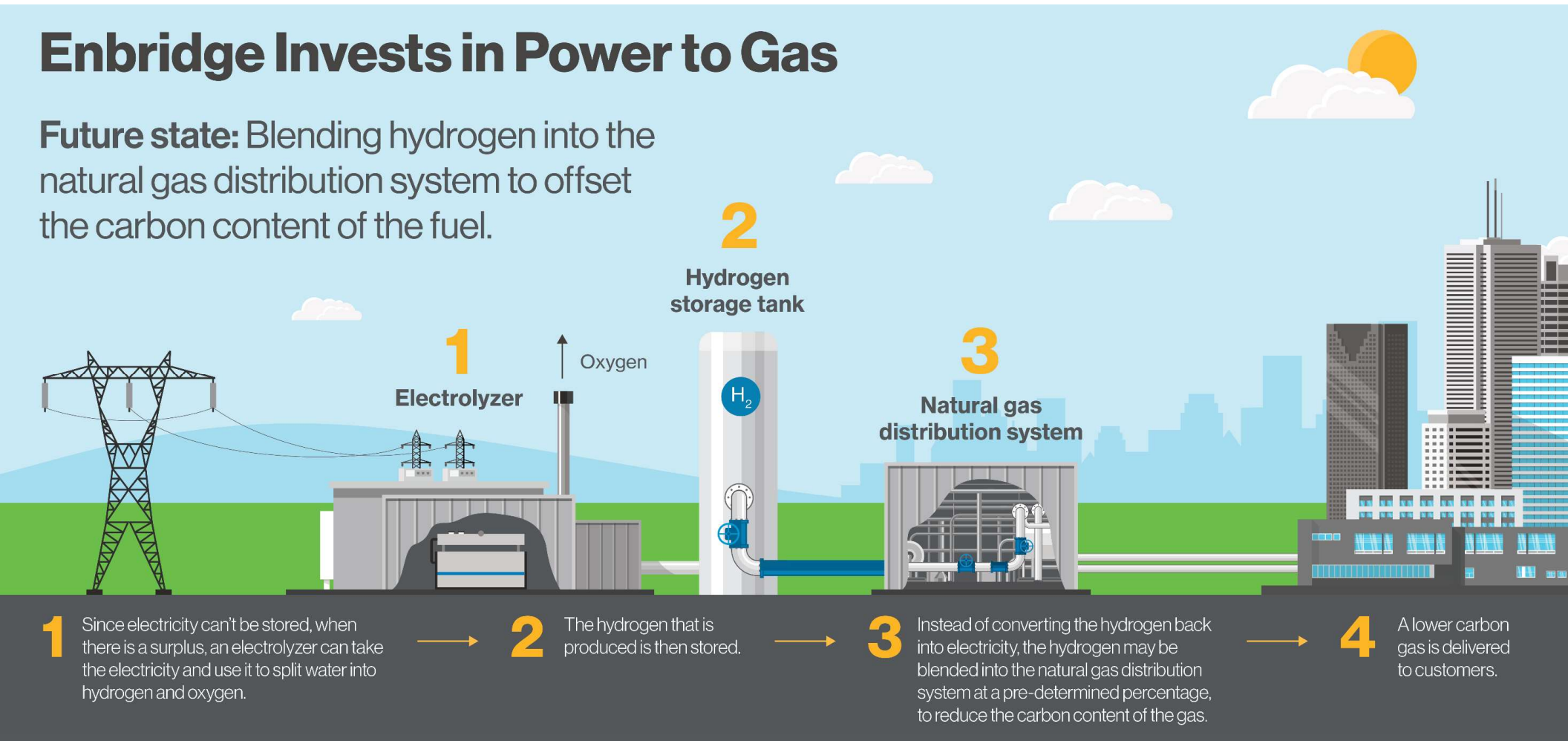
- Ancillary services — controllable variable load — rapid response frequency regulation up/down
- Enabler of dispatchable power (e.g., wind, solar)
- **Fuel for zero emission vehicles (cars, buses, trains)**
- **Building heating and other industrial applications**
- **High quality and temperature heating**
- **Greening the gas grid by lowering carbon content**

Grid storage: a new energy inter-tie between wires and pipes



Enbridge Invests in Power to Gas

Future state: Blending hydrogen into the natural gas distribution system to offset the carbon content of the fuel.

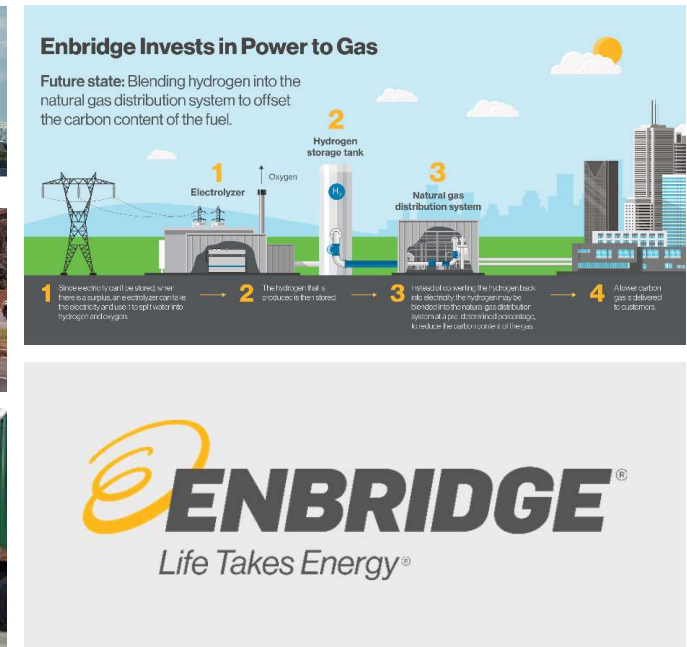
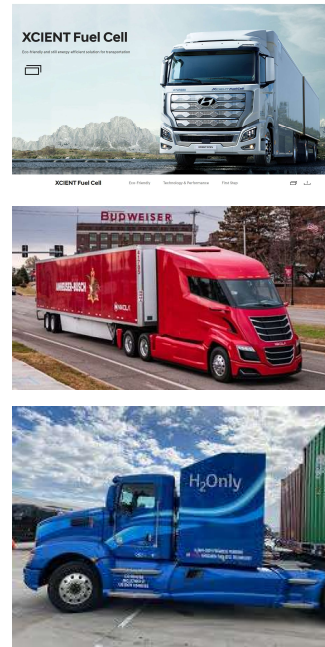


Future use of hydrogen at Enbridge Gas



We can:

- Inject into the natural gas grid for large scale storage
- Enable dispatchable power (e.g., wind, solar)
- Convert to electricity for grid stabilization (Regulation Services)
- Use it for zero emission transportation (cars, buses, trains)
- Green the gas grid and lowering GHG emission
- Feedstock (ammonia, fertilizer, methanol)
- 2021-Toyota Mirai, 850 km range 5 minute refueling



global.toyota/pages/news/images/2020/12/09/1200/20201209_01_02_en.pdf#page=27

Q & A

Closing remarks
