

Enbridge Gas

Demand Side Management & Energy Transition



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Agenda

- Background
- Demand Side Management
- Energy Transition
- Support for Municipalities



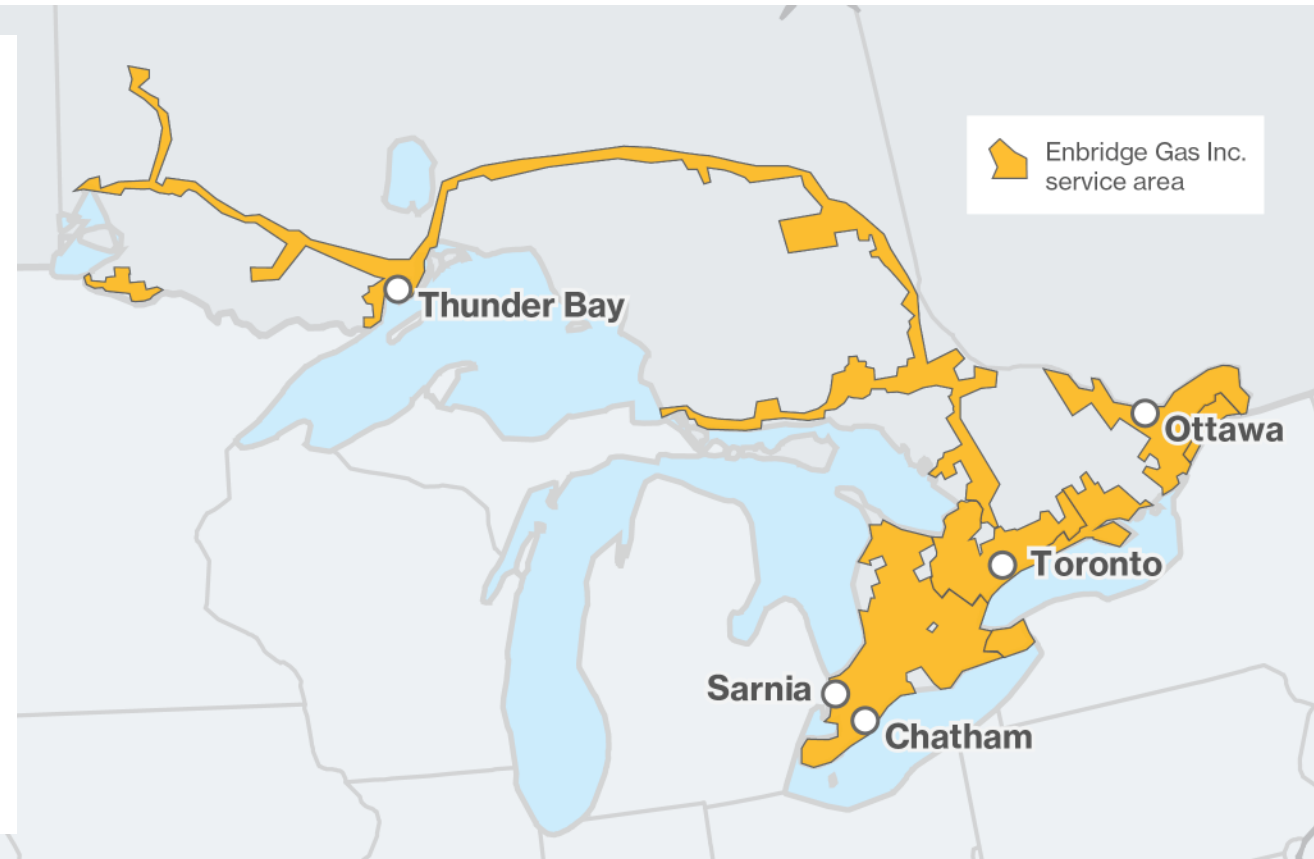
Enbridge Gas Inc.



North America's largest natural gas storage, transmission and distribution company

We deliver the energy that enhances people's quality of life.

- **Values**
Safety, Integrity, Respect, Inclusion.
- **Experience**
170+ years of experience in safe and reliable service.
- **Distribution Business**
3.8M customers, heating >75% of Ontario homes.
- **Dawn Storage Hub**
Canada's largest integrated underground storage facility and one of the top natural gas trading hubs in North America.
- **Advancing Innovative Low-Carbon Solutions**
Conservation, cleaner technologies for heat/transportation (CNG, geothermal), green fuels (RNG, hydrogen).



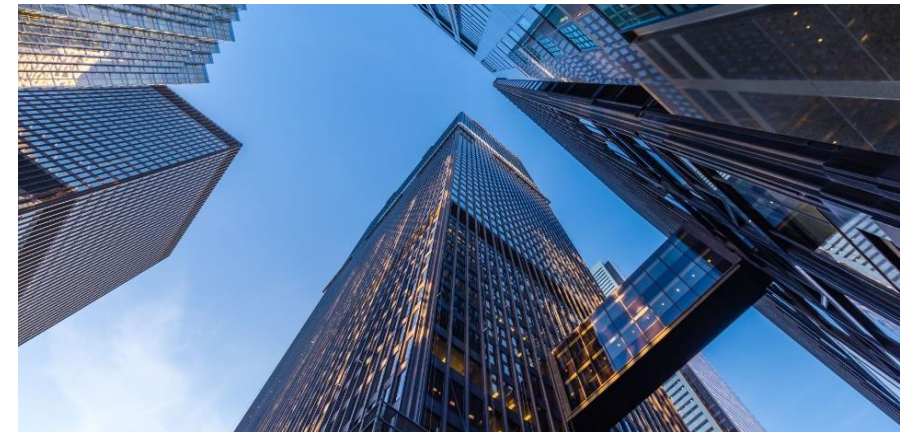
Demand Side Management



Sustainability at Enbridge Gas

- Enbridge Gas is recognized as a leader in energy efficiency and conservation.
- Between 1995 and 2020, our energy efficiency programs reduced customer consumption by 29.2 billion cubic metres of natural gas.^{1, 2} These gas savings have resulted in a reduction of 54.7 million tonnes of greenhouse gas emissions. This is the equivalent of taking 11.9 million cars off the road for a year, or enough natural gas to heat 12.7 million homes for a year.^{3, 4}

1. 2020 results are unaudited and subject to change.
2. Assumes 1.874 kg of CO₂e are emitted for each m³ of gas that is consumed.
3. Assumes the average passenger vehicle produces 4.6 tonnes of CO₂ per year.
4. Assumes a residential customer uses 2,400 m³ in Enbridge rate zone and 2,200 m³ per year in Union rate zone to heat their home and water.



Demand Side Management

- Mandated by the Ontario Energy Board (OEB)
- **“DSM Framework”** sets out guiding principals and objectives that should be used by natural gas utility in developing energy conservation plans
- Programs designed to help our customers use their natural gas as efficiently as possible in the residential, commercial, and industrial sectors



Residential



Commercial



Industrial

Enbridge Gas Energy Efficiency Programs



Commercial

Commercial customers:

- Multi-residential buildings
- Hotels
- Long-term care homes
- Schools
- Offices
- Institutions (universities, colleges, hospital)

Enbridge Gas Energy Efficiency Programs

- We'll work with you year-round to:
 - Understand your business needs and set goals to save.
 - Identify and prioritize energy projects.
 - Calculate estimated savings on all energy sources to help build your business case.
 - Reduce GHG and carbon emissions
 - Get incentives to speed up payback and make the incentive application process easy for you.
 - Provide technical support for new technologies and processes.



Expert advice at every step

Enbridge Gas Energy Efficiency Programs

Confidence in savings

- Internal and external auditing process in place.
- Choose your own vendors and equipment.
 - No list of approved vendors or equipment.
- Unbiased opinions.
- Customer receives a one-time monetary cheque as an incentive.



Involvement with customers and business partners every step of the way

Enbridge Gas Energy Efficiency Programs Commercial Programs



1. Fixed Prescriptive Program
2. Custom Retrofit Program
3. Custom Audits and Studies
 - Consult your Energy Solutions Advisor (ESA) for more information
4. Operational Improvements
 - Consult your ESA for more information

2022 Commercial Energy Efficiency Programs

Incentives and expert advice to save energy

"The end result is a safer, more efficient building, the smartest controls and a large reduction in natural gas use."
Graeme McKenzie, Energy Coordinator, District School Board of Niagara

Free, on-site visit from an Energy Solutions Advisor.

Expert help to identify opportunities to save.

Get paid for energy-efficient upgrades.

St. Catharines Collegiate saved with a
\$22,120
incentive

We can help you save too

Improve energy efficiency, lower costs and get faster payback by upgrading your equipment

Enbridge Gas Energy Efficiency Programs

Fixed Prescriptive Program



- Fixed incentives for the purchase and installation of energy-efficient equipment.
- Program works like a coupon where incentives are provided upon proof of purchase to customers who install high-efficiency upgrades with the help of Enbridge Gas incentives and expert advice.
- Customer incentives cover up to 50% of project cost
- Service Provider/Distributor incentives ranging from \$50 to \$100 per unit also available.



Fixed incentives based on technology implemented

Enbridge Gas Energy Efficiency Programs

Equipment eligible for Fixed Incentives



Equipment	Amount	Criteria
Air Curtain	\$300 - \$8,750	Type and size of door
Condensing Make-Up Air	\$750 - \$14,000	Speed and CFM
Demand Control Kitchen Ventilation	\$2,700 - \$8,800	CFM
Demand Control Ventilation	\$500	
Destratification Fan	\$1,000	
Dock Door Seal	\$950 - \$1,650	Type and size of door
Energy Recovery Ventilator	\$200 - \$8,000	CFM and sensible heat recovery effectiveness
Heat Recovery Ventilator	\$200 - \$5,000	CFM and sensible heat recovery effectiveness
Ozone Laundry	Up to \$15,000	Lbs of laundry processed annually

Fixed incentives based on technology implemented

Enbridge Gas Energy Efficiency Programs

Custom Retrofit Program



- Incentives are available for eligible energy efficiency projects based on estimated annual natural gas savings achieved.
- Incentive rate: \$0.20/m³ gas saved
- Incentives cover up to 50 percent of project costs, to a maximum of \$100,000 per project.
- Incentives paid to customers upon proof of purchase and installation.

Get
\$0.20/m³
natural gas saved



Custom incentives based on estimated annual natural gas savings x \$0.20/m³

Enbridge Gas Energy Efficiency Programs

Custom Retrofit Program



Boilers



Water heating systems



Building automation systems



Heat recovery



Variable frequency drives (VFDs)

Custom incentives based on estimated annual natural gas savings x \$0.20/m³

Commercial Custom Program Space Heating Boiler Retrofit



- Library >180,000ft²
- Total annual building consumption – 241,282m³/yr
 - Space heating portion is 211,221m³/yr
- Existing equipment – two atmospheric boilers
- Proposed – replace with three mid efficiency boilers with 85% efficiency
 - Resulting SH consumption is 150,506m³/yr, a reduction of 60,715m³/yr



Cost	\$94,600
Incentive	\$10,367
Gas cost savings	\$22,465 / year
Simple Payback	3.88 years
CO2 reduction	113.8 tonnes / year

Custom incentives based on estimated annual natural gas savings x \$0.20/m³

Commercial Custom Program Pool Drainage Water Heat Recovery



- Lap pool and therapy pool servicing 550 bathers in a day
- Utilizes a heat exchanger to pre-heat incoming city water is from 50 F to 77 F using the pool drainage water



Incentive	\$1,995.00
Gas savings	9,975 m ³ /year
Gas cost savings	\$3,690.75/year
CO2 reduction	18.7 tonnes/year

Custom incentives based on estimated annual natural gas savings x \$0.20/m³

Commercial Custom Program Cold Water Ice Resurfacing



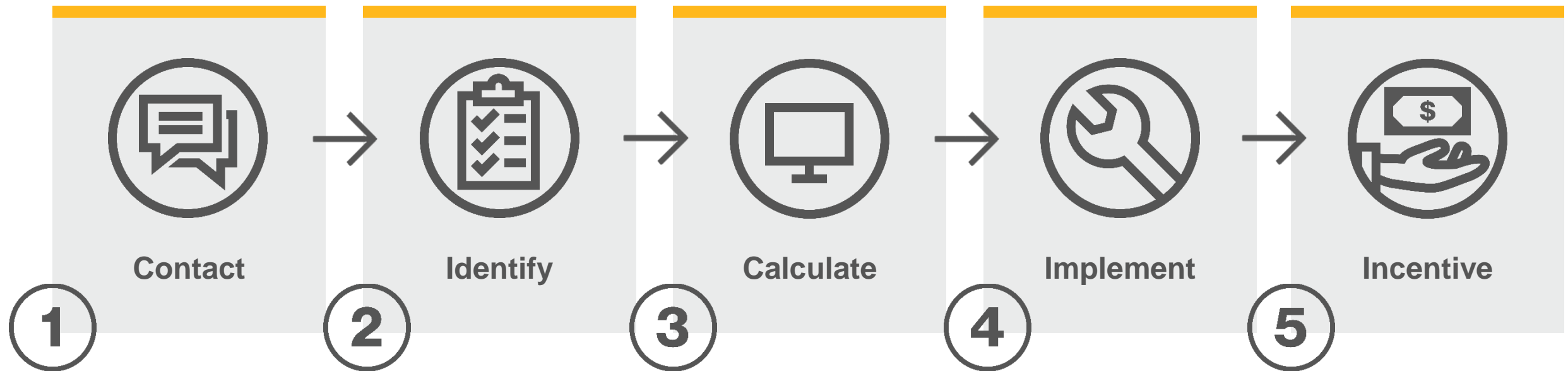
- 2 rinks, operational 42 weeks in a year
- Eliminates the need to heat water to 160 F
- Water is spun in a vortex to remove the micro air bubbles (dissolved oxygen). Bubbles are removed before water is frozen on the rink in order to make a clean, solid, dense sheet of ice
- Uses unheated water at 50 F and therefore saves natural gas



Incentive	\$5,901.79
Gas savings	29,509 m ³ /year
Gas cost savings	\$10,918.33/year
CO2 reduction	55 tonnes/year

Custom incentives based on estimated annual natural gas savings x \$0.20/m³

Enbridge Gas Energy Efficiency Programs



Energy Transition & Municipal Support

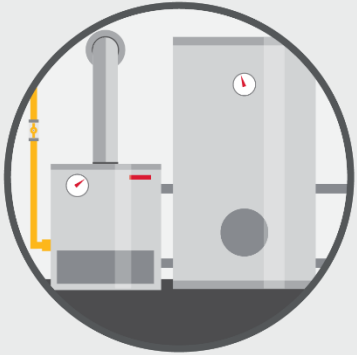
Energy Transition in Ontario

- Enbridge exists to meet the energy needs of our customers, safely, reliably and affordably
- 75% of Ontario households depend on natural gas as an affordable energy choice, and many more rural and remote communities are looking to obtain gas service.
- At the same time municipalities, businesses and families are increasingly focused on lowering GHG emissions.
- Enbridge has the scale and experience to help society transition to a lower-emissions future.
- And across our business, we've committed to achieving net-zero GHG emissions in our own operations.



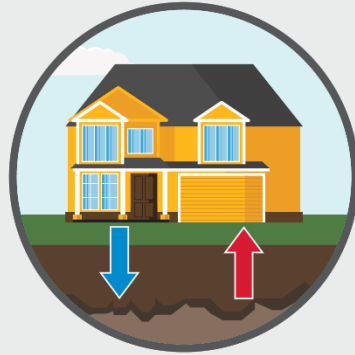
Towards a net-zero future

Using less gas



- Energy efficiency programs
- Hybrid heating
- Natural gas heat pumps
- District energy systems

Non-gas solutions



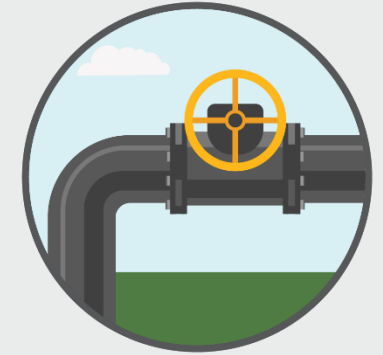
- Geothermal
- Solar
- MicroGeneration
- Carbon capture utilization and storage (CCUS)
- Battery storage
- Integrated resource planning (IRP)

Carbon-neutral gas



- Hydrogen: Power to Gas
- Renewable Natural Gas (RNG)

Fuel switching



- Replacing oil, propane and wood for home and water heating
- Compressed natural gas (CNG) vehicles

Municipal Support



- ① We provide current consumption data (in metres cubed and greenhouse gas emissions).
- ② We can help set reduction targets
- ③ We can offer expertise and assist with the development of the Community Energy Plan.
- ④ We'll help the Plan leverage our programs and offerings to assist with the energy use and GHG reduction plans and goals, such as DSM programs, renewable natural gas, compressed natural gas, geothermal, district systems).
- ⑤ We can provide updated data at regular intervals to track progress towards the Plan's goals.

Thank you

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