

2024 Energy Conservation Program

Industrial and Commercial Demand Side Management (DSM)

Enbridge Gas Inc.

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



Gas utility

- 3.9 million retail customers
 - 75% of Ontario homes
 - 99.9% reliability
-

30%

of Ontario's energy
needs delivered



Sustainable energy provider

- Advancing sustainable energy solutions for Ontario
 - Conservation, renewable gases, green technologies
-

Net-zero

emissions in Enbridge
operations by 2050

Enbridge is advancing reliable and cost-effective solutions for Ontario's net-zero energy future

Conservation



Helping homes, business and industry use less energy through conservation programs

Renewable gases



Advancing the transition to renewable gases:

- Hydrogen
- Renewable natural gas
- RNG programs and hydrogen blending

Clean energy technologies



For fleets and heavy transport that can't be practically electrified:

- CNG
- RNG
- Hydrogen



For reliable, cost-effective and sustainable heat:

- Hybrid heating
- Geothermal
- CHP
- Solar PV
- Waste heat recovery

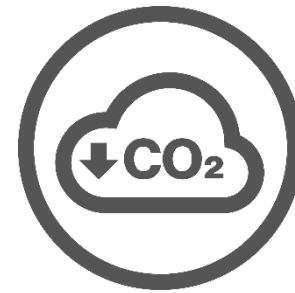


For energy-intensive processes that can't be electrified:

- Clean and low-emission gases
- Carbon capture and storage

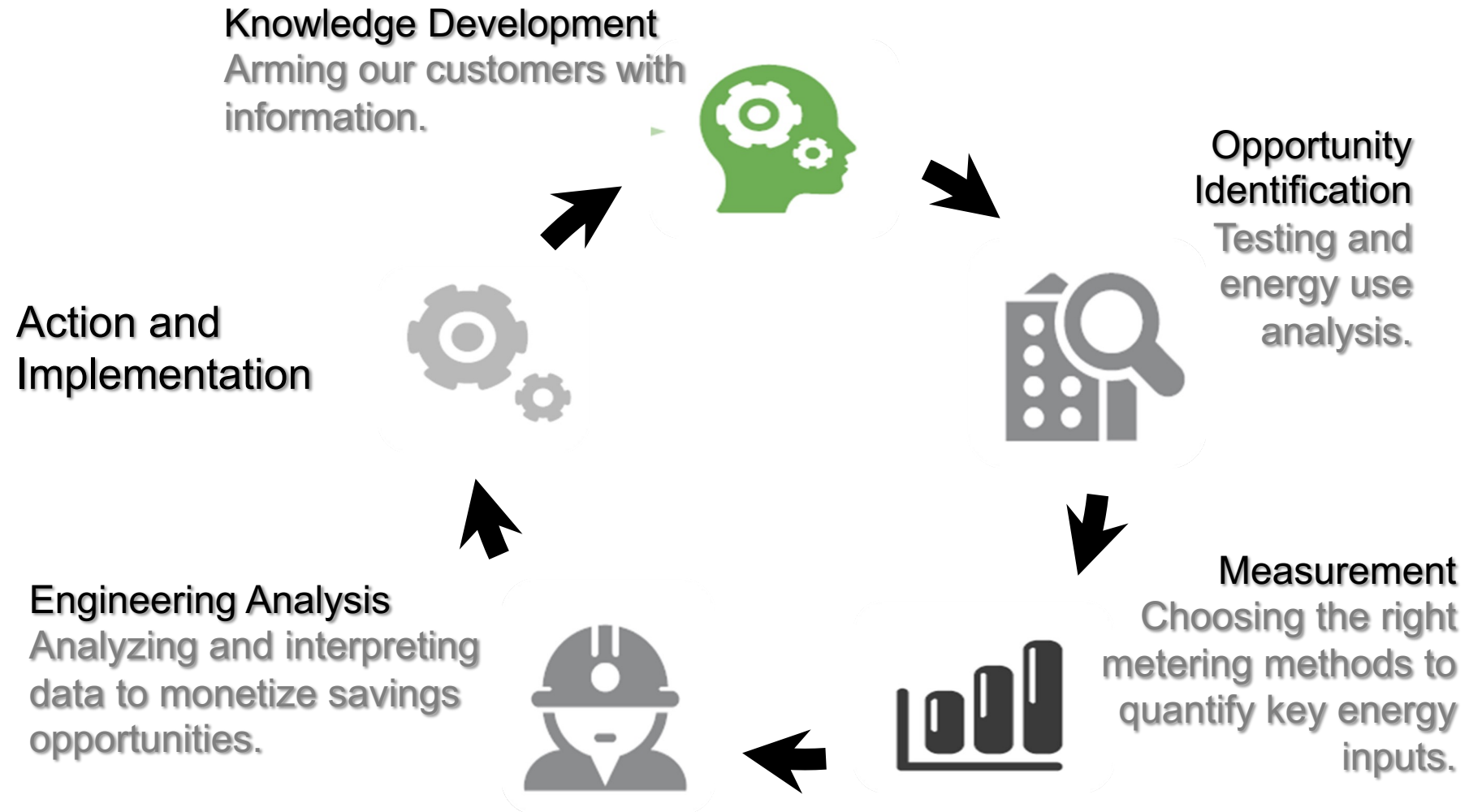
Conservation is a key pillar to reach net zero

- For many, net zero is a multi-decade journey involving a phased approach.
- Energy conservation is an integral step, allowing you to **directly reduce greenhouse gas (GHG) emissions while saving on operating costs.**
- Reducing energy demand enables the electric grid to handle growing overall demand as electrification evolves.



Join countless others to save on cost and reduce emissions

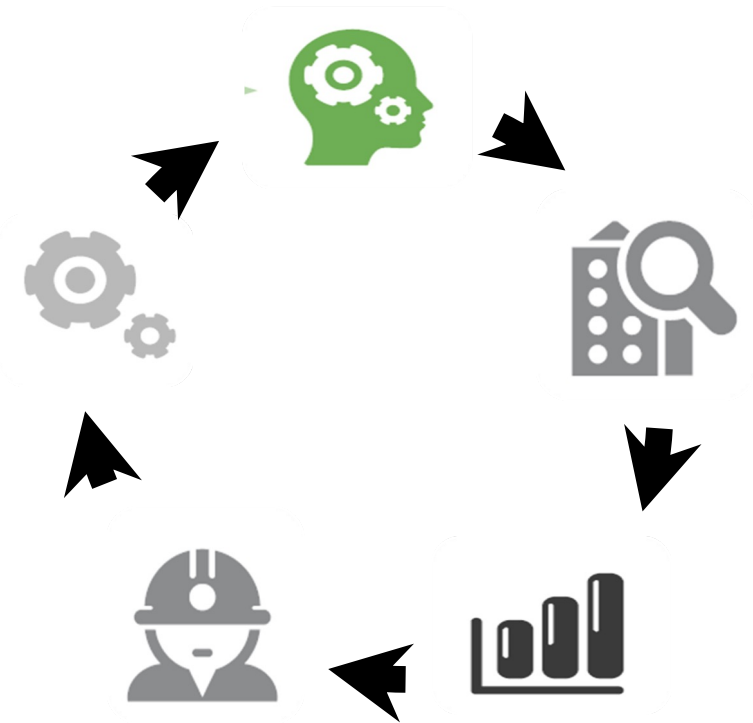
Enbridge Custom Program



Large Industrial & Commercial Program

Program offerings based on :

- Over **25 years of experience**;
- Gained Customer trust through direct involvement with customers and/or trusted business partners;
- Auditing process in place to ensure calculated savings are realistic → confidence in investment.
- New programs approved through to 2027 → providing stability to customers in today's dynamic energy efficiency marketplace.



Large Industrial & Commercial Program

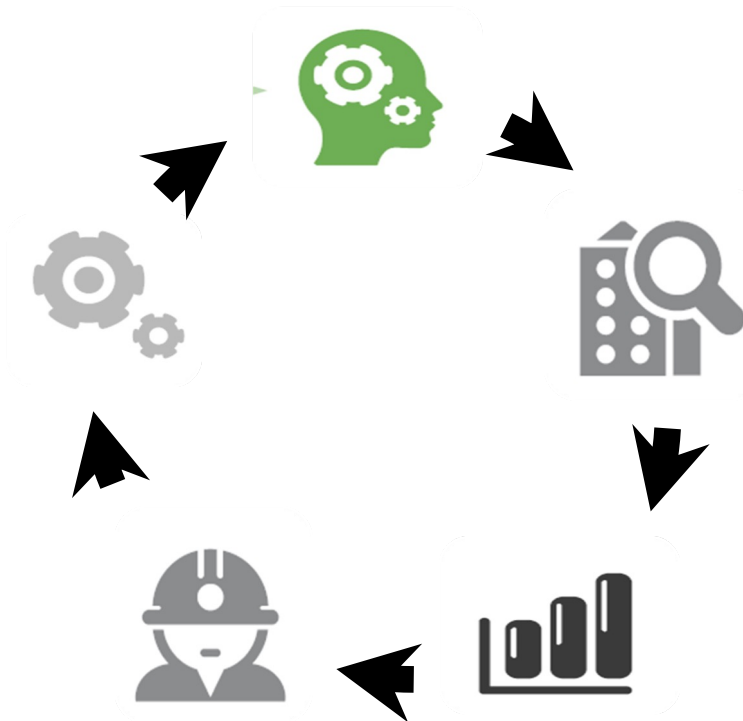
Helped our customers save :

- Approx. 175,000,000 m³ of natural gas;
- For industrial customers, we have also identified:
 - More than 20,000,000 KWh of electricity;
 - And over 800,000 m³ of water savings.

In a three year period ALONE.

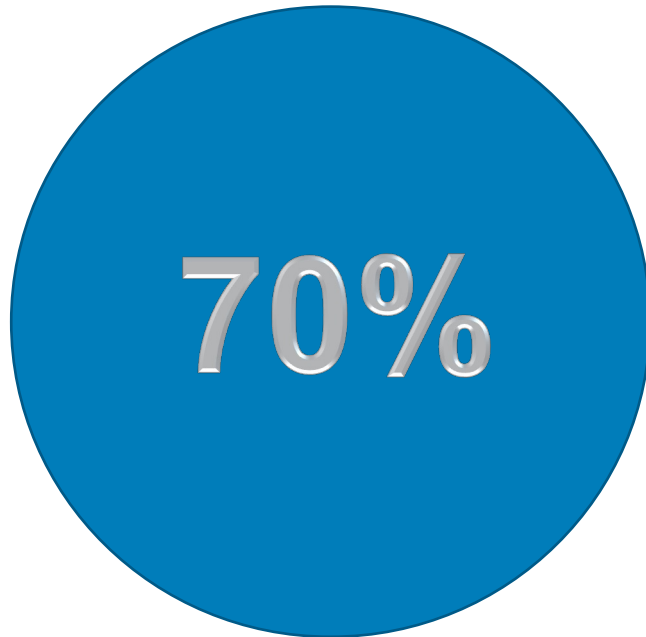
Participating in our programs helps :

- Improve customer's bottom line;
- Reduce CO₂ emissions.



Energy Efficiency is About Reducing Waste

U.S. Department of Energy publication, in 2015:

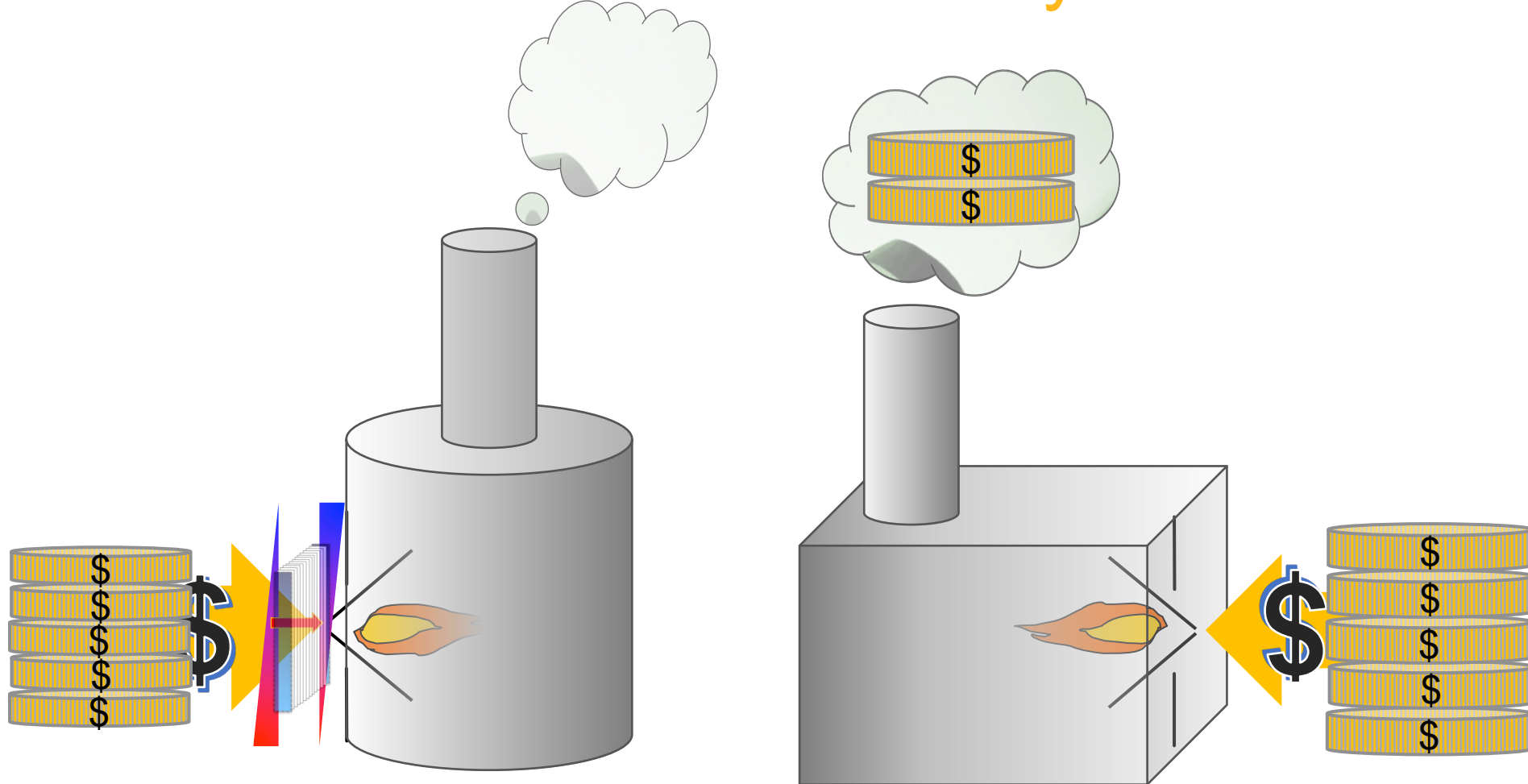


70% all energy consumed in United States went towards **process heating**



20-50% was converted into **waste heat**

Importance of Waste Heat Recovery



- Capturing waste heat increases heating efficiency of your processes → lowering costs of production.

Why Manage Energy?



DECISIONS
based on
knowledge



ACTIONS
based on
decisions



SAVINGS
based on
actions

Why Manage Energy?

– Non-energy Benefits :

- Make better capital investment decisions - knowing where and how much energy is consumed in equipment;
- Operational improvements;
- Better preventative maintenance
 - Increased up time
 - Enhanced utilization rates.



Industrial – Custom Program

Energy Solutions Advisors can help



Understand business needs and set goals to save.



Identify and prioritize energy projects.



Calculate estimated savings on all energy sources.



Help build your business case.



Provide technical support.

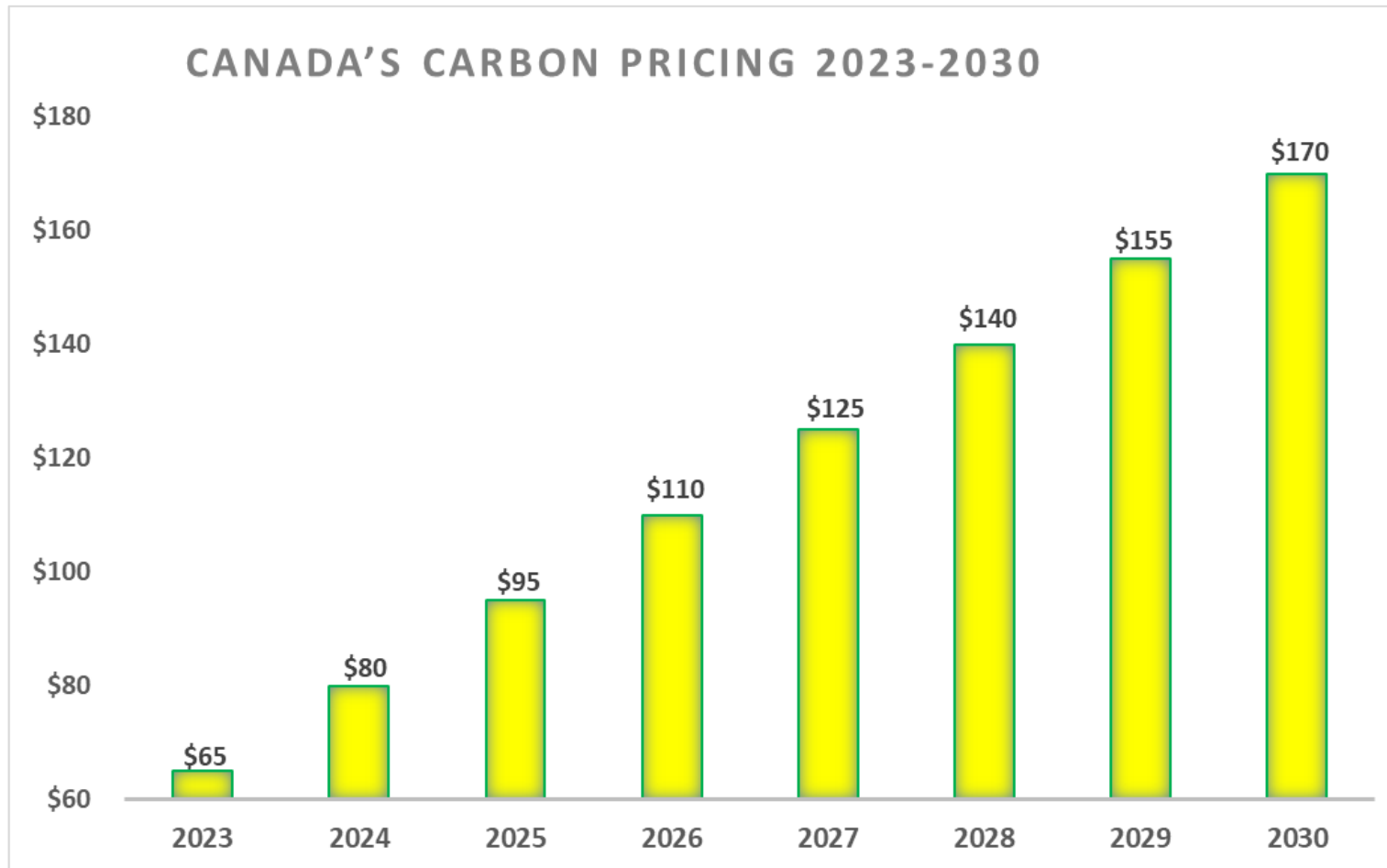


Award financial incentives to speed up payback.

Expert advice at every step

Environmental Impact

- Projected Increase in the cost of carbon per metric tonne emissions through 2030



Financial Benefit

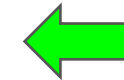
Example Custom Industrial DSM Project

Projected annual natural gas savings: 100,000 [m3/yr]

Estimated benefits extrapolated over the next 7 years...

Based on current
incentive structure

Enbridge Custom Incentive: \$ 15,000



Annual GHG emission reduction: 187.50 [MT/yr]

GHG Avoidance over 7 years: \$ 176,250

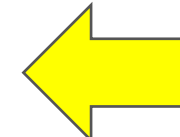


Estimated cost of natural gas: 0.40 [\$/m3]

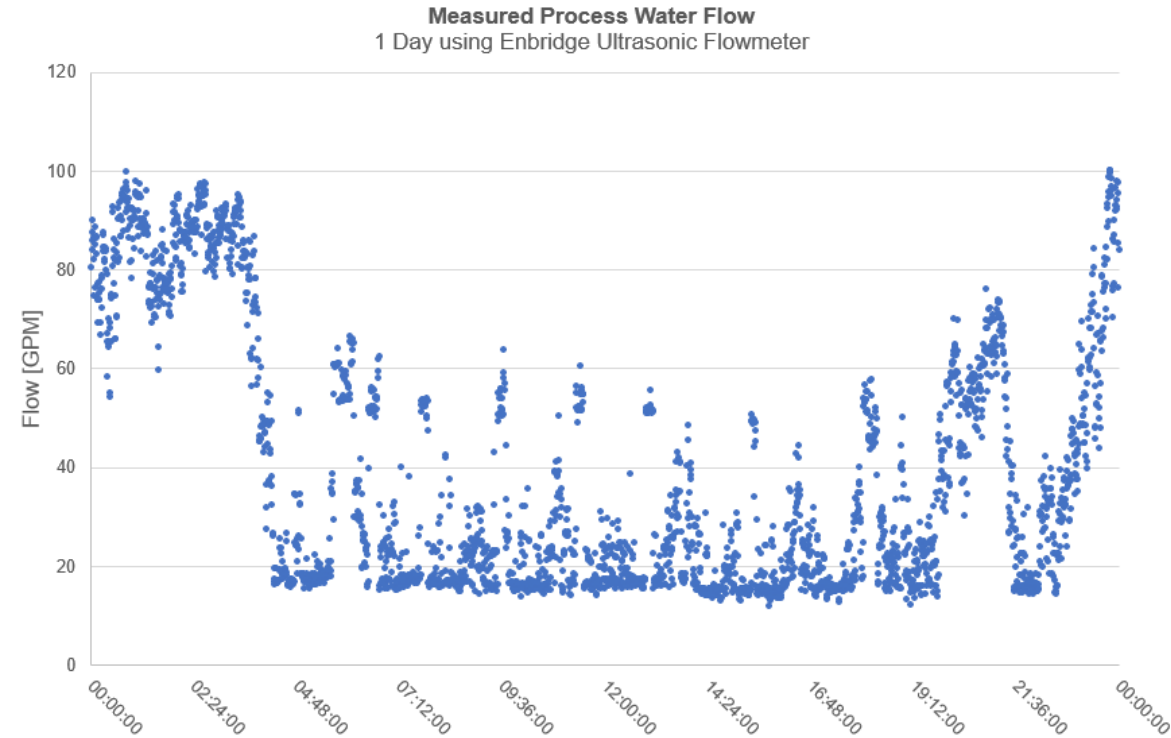
Cost avoidance over 7 years: \$ 320,000



Total financial benefits to customer over 7 years: \$ 511,250



Case Study – Feedwater or Condensing Economizer



20-40 GPM **cold** process water flow, steady and consistent load

Energy Required to Heat: 1,350,000 BTU/h - \$89,000 per year cost currently heated by steam, could be heated from flue gas heat recovery (condensing unit)

Case Study – Feedwater or Condensing Economizer



Project	Year	Utility Savings	Carbon	Utility Cost			
		Est. Natural Gas Savings	Carbon Savings	Base Natural Gas Cost	Carbon Tax Cost	Carbon Cost	Total Natural Gas Unit Cost
		[m3/yr]	[Tonne CO2eq/yr]	[\$/m3]	[\$/Tonne CO2 eq]	[\$/m3]	[\$/m3]
Feedwater Economizer On Boiler	2023	42,070	79	0.25	65	\$0.12	\$0.37
	2024	42,070	79	0.25	80	\$0.15	\$0.40
	2025	42,070	79	0.25	95	\$0.18	\$0.43
	2026	42,070	79	0.25	110	\$0.21	\$0.46
	2027	42,070	79	0.25	125	\$0.23	\$0.48
	2028	42,070	79	0.25	140	\$0.26	\$0.51
	2029	42,070	79	0.25	155	\$0.29	\$0.54
Condensing Economizer on Boiler (to warm process water)	2023	132,173	248	0.25	65	\$0.12	\$0.37
	2024	132,173	248	0.25	80	\$0.15	\$0.40
	2025	132,173	248	0.25	95	\$0.18	\$0.43
	2026	132,173	248	0.25	110	\$0.21	\$0.46
	2027	132,173	248	0.25	125	\$0.23	\$0.48
	2028	132,173	248	0.25	140	\$0.26	\$0.51
	2029	132,173	248	0.25	155	\$0.29	\$0.54

Cost Savings	Project Cost	One-Time Enbridge Incentive	Payback
[\$/yr]	[\$]	[\$]	[yr]
\$15,645	\$16,500	\$8,250	0.5
\$16,828	-	-	
\$18,011	-	-	
\$19,194	-	-	
\$20,378	-	-	
\$21,561	-	-	
\$22,744	-	-	
\$49,152	\$80,000	\$18,217	1.2
\$52,869	-	-	
\$56,587	-	-	
\$60,304	-	-	
\$64,021	-	-	
\$67,739	-	-	
\$71,456	-	-	

Enbridge Gas energy efficiency programs

Confidence in savings

- Internal and external auditing process in place.
- Unbiased opinions.
- Customer receives a one-time monetary cheque as an incentive.



Involvement with customers and business partners every step of the way

Commercial – Fixed incentive offers

Equipment eligible for fixed incentives

1 **Air curtain**
(\$200 – \$8,750 per unit)

2 **Condensing make-up air**
(based on CFM, \$750 – \$14,000 per unit)

3 **Demand control kitchen ventilation**
(\$1,200 – \$9,000 per unit)

4 **Demand control ventilation**
(\$500 per unit)

5 **Destratification fan**
(\$1,000 per unit)

6 **Dock door seal**
(\$650 – \$1,650 per unit)

7 **Energy recovery ventilator**
(based on CFM, \$200 – \$8,000 per unit)

8 **Heat recovery ventilator**
(based on CFM, \$200 – \$5,000 per unit)

9 **Ozone laundry**
(\$0.04 per lb, up to \$15,000 per unit)

Coverage: up to 50 percent of project costs, to a maximum of \$100,000 per project.

2024 Limited-time bonus offers (LTO)

- Enhanced customer incentives available for:
 - Ozone laundry
 - Destratification fans
 - Multi-install demand control kitchen ventilation (DCKV) projects
- Equipment must be purchased Jan. 1, 2024 – Sept. 30, 2024; and
- Installed with paperwork submitted to Enbridge Gas by Oct. 31, 2024
- Special offer for Business Partners: Multi-unit installation year-end bonus
- Please reach out to an Enbridge Gas Energy Solutions Advisor at energyservices@enbridge.com for detailed terms and conditions.

Commercial – Custom incentive offers

Year-round offers for commercial projects

① Energy assessment incentives

Pre-approval required. Eligible assessments:

- HVAC/controls audits (ASHRAE Level 2 minimum)
- Facility air-balances
- Benchmarking activities
- Thermal surveys
- Steam trap audits

Previous year consumption per address (m ³)	Up to 50 percent of eligible costs, to maximum incentive stated (per address per year)
100,000 – 300,000	\$1,500
300,000 – 1,500,000	\$2,500
1,500,000 – 3,000,000	\$6,000
3,000,000 or greater	\$10,000

② Implementation incentives

Custom incentives for projects that save natural gas and have no fixed incentive offer, such as:

- Waste heat recovery
- Boiler upgrades
- Building automation systems and ventilation controls
- Variable frequency drives

\$0.25/m³ of natural gas saved

Up to 50 percent of upgrade costs*, to a maximum of **\$100,000 per project**.

* Upgrade costs are the difference between the equipment and implementation costs of the energy-efficient option and those of the alternate option considered.

Year-round offers for institutional projects

① Energy assessment incentives

Pre-approval required. Eligible assessments:

- HVAC/controls audits (ASHRAE Level 2 minimum)
- Facility air-balances
- Benchmarking activities
- Thermal surveys
- Steam trap audits

Previous year consumption per address (m ³)	Up to 50 percent of eligible costs, to maximum incentive stated (per address per year)
100,000 – 300,000	\$1,500
300,000 – 1,500,000	\$2,500
1,500,000 – 3,000,000	\$6,000
3,000,000 or greater	\$10,000

② Implementation incentives

For institutional projects at universities, colleges, hospitals, military bases and buildings connected to district energy. Custom projects such as:

- Waste heat recovery
- Boiler and controls upgrades
- Air-to-water heat pumps

\$0.25/m³ for first 400,000 m³ of gas saved
\$0.10/m³ for subsequent m³ of gas saved

Up to 50 percent of upgrade costs*, to a maximum of **\$0.5 million per project.**

* Upgrade costs are the difference between the equipment and implementation costs of the energy-efficient option and those of the alternate option considered. 24

Amendment 15: Important changes to boiler efficiency standards



Amendment 15 is a directive passed by the Government of Canada.



Starting in **2025**, manufactured commercial boilers between 300K – 10M BTU/h must have a **thermal/combustion efficiency of at least 90 percent**.



The **only boiler retrofit option** for most commercial buildings will be to upgrade to a **condensing boiler**.



2024 Early bird offers

Boiler early bird offer

- Commit by June 30, in service by Oct. 31
- **\$0.50/m³** for condensing boilers **(2x)**
- **\$0.30/m³** for high-efficiency boilers
- Up to **75 percent** of upgrade costs, to a maximum of **\$100,000/project**
- **Business partner incentive:** \$100 per boiler, up to \$1,000 per project

Note: boilers less than 300 MBH must be over 90 percent efficient to qualify for any incentives.

Controls early bird offer

- Commit by June 30, in service by Oct. 31
- **\$0.50/m³** for controls measures **(2x)**
- Up to **75 percent** of upgrade costs, to a maximum of **\$100,000/project**
- **Business partner incentive:** \$200 per project

Eligible controls projects:

- Boiler controls
- Building automation system (BAS)
- Variable frequency drive (VFD)
- Variable air volume (VAV)

Early bird bonus incentives end June 30

- Don't miss out—up to double incentives for boiler and control upgrades!
- Qualify your project with an Enbridge Gas Energy Solutions Advisor (ESA) before June 30, 2024 and put it in service by Oct. 31, 2024.

Condensing boilers and controls upgrades:

\$0.50/m³ of natural gas saved (double)

High-efficiency boilers:

\$0.30/m³ of natural gas saved

Up to 75 percent of upgrade costs, to a maximum of \$100,000 per project.



2024 Early bird offers

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Eligible controls projects:


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- Building automation system (BAS)
- Variable frequency drive (VFD)
- Variable air volume (VAV)

Custom incentive offers

Hybrid rooftop unit (RTU) limited-time offer



- Dollar per unit incentives for replacement of a conventional RTU near or at end of equipment life with a dual-fuel RTU.
- Dual-fuel RTU: heat pump provides heating and cooling with back-up natural gas heating, to supplement as needed.
- **Contact an Enbridge Gas Energy Solutions Advisor** early in the scoping stage to qualify your project.
- Commit by March 31, 2024 (purchase order).
- Put it in service by Oct. 31, 2024.



Incentives on hybrid rooftop units (RTUs)		
Cooling capacity	Customer incentive \$/unit	Business Partner incentive (\$/unit)
2 ton	\$1,000	\$200
3 ton	\$2,000	\$200
4 – 5 tons	\$2,500	\$200
6 – 15 tons	\$3,800	\$200
16 tons or over	\$10,000	\$200

Why work with us?



Audits, studies and site visits to help identify opportunities.



Technical support and expertise to help reinforce and verify estimated savings, including payback.



Estimate energy efficiency incentives to improve business cases.



We'll take care of the incentive application and most of the paperwork.

Q&A

Connect with your Energy Solutions Advisor for individualized assistance

Contact Information:

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416-996-8431