A Roadmap to Greenhouse Gas Emissions Reduction - benefits for your business



Presented by ClimateWise Building Challenge



Our hosts





Harry French
ClimateWise Building Challenge
Program Manager



Audrey Bayens *ClimateWise Building Challenge Program Coordinator*



Who are we



The ClimateWise Building Challenge is a York Region wide, friendly awards and recognition competition created to reduce energy consumption and greenhouse gas emissions (GHGs) in buildings through collaboration, education, and innovation.

The competition is free of cost and open to building owners, landlords, managers, and tenants who want to join the fight to combat climate change while improving your bottom line by implementing responsible energy operations and behavioural practices.

Supported by



Share a Roadmap



- Commercial building tenant roadmap to taking action on climate change.
- Educate on the opportunities
 - know the signposts.
- How to engage with your landlord.



What we want to accomplish today

- Inspire you to action and hope.
- Understand the climate crisis and role of buildings.
- Identify benefits of being sustainable (energy, waste).
- Share some case studies and best practices.
- To equip you with the tools to begin the development of a sustainability plan for your small business.
- How ClimateWise Building Challenge enables your climate action success.





Why we need to take Climate Action

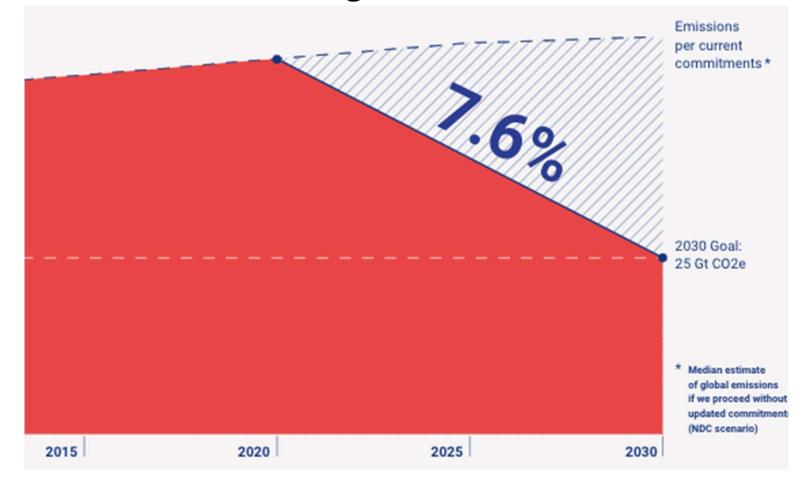






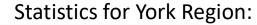
Build hope, create a target

Cut global emissions by 7.6 percent every year for next decade to meet 1.5°C Paris target



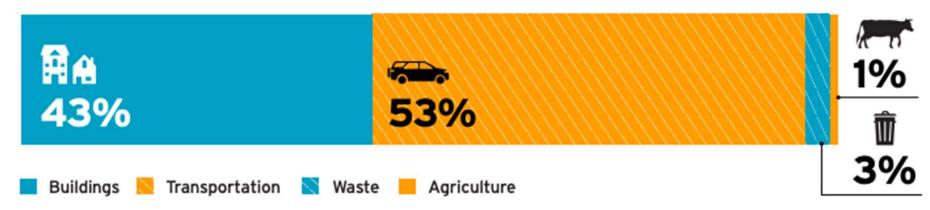
(IPCC 2019 Emission Gap Report)

Understand your current situation



 2015
 2016
 2017
 2018

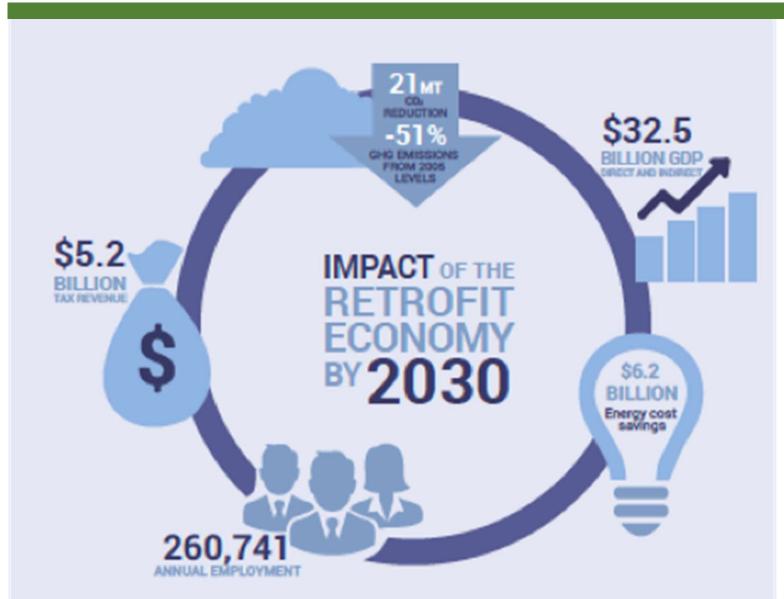
 7.3 Mt
 7.0 Mt
 7.0 Mt
 7.6 Mt



Source: Reality Check: Toronto Atmospheric Fund, 2020

- Businesses within commercial buildings account for 60 80% of energy consumption.
- If Canada is to meet its net zero commitments by 2050 retrofit actions by building and business owners will be critical.

Economic Impacts of taking action



The Potential of Canada's Retrofit Economy by 2030

Source: A Roadmap for Retrofits in Canada (2017) Canada Green Building Council



Assess future conditions



Building energy performance disclosure.

- Ontario Energy and Water Reporting and Benchmarking.
- USA cities such as New York – building GHG emission caps
- Toronto Green Standard Update

TRACK TO SAVE

Ontario's Energy and Water Reporting and Benchmarking for large buildings

Climate related financial disclosure.

Investor requests to adopt the recommendations for voluntary climate-related financial disclosures issued by Financial Stability Board Task Force on Climate-Related Financial Disclosure (Mark Carney)





Business that is successful.
You can be too!



Connecting actions to energy savings

Vornado Realty Trust, a leader in sustainability and energy efficiency realized that energy use in common areas was going down but energy use in tenant spaces – accounting for up to 70% of energy consumption – was staying flat.



SOLUTION: their Energy Information Portal (EIP)



Stronger Landlord-tenant relationships

Hines developed and launched an internally GREEN OFFICE program to measure and reward sustainable practices in the firm's 200 offices worldwide.

Tenants began to ask property teams for ways to improve sustainability in their leased spaces.



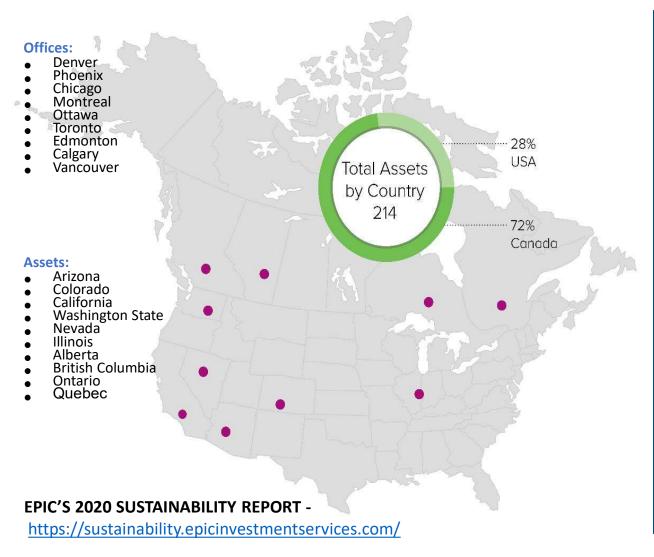
SOLUTION: an internal Green Office Program





Learn from the leaders

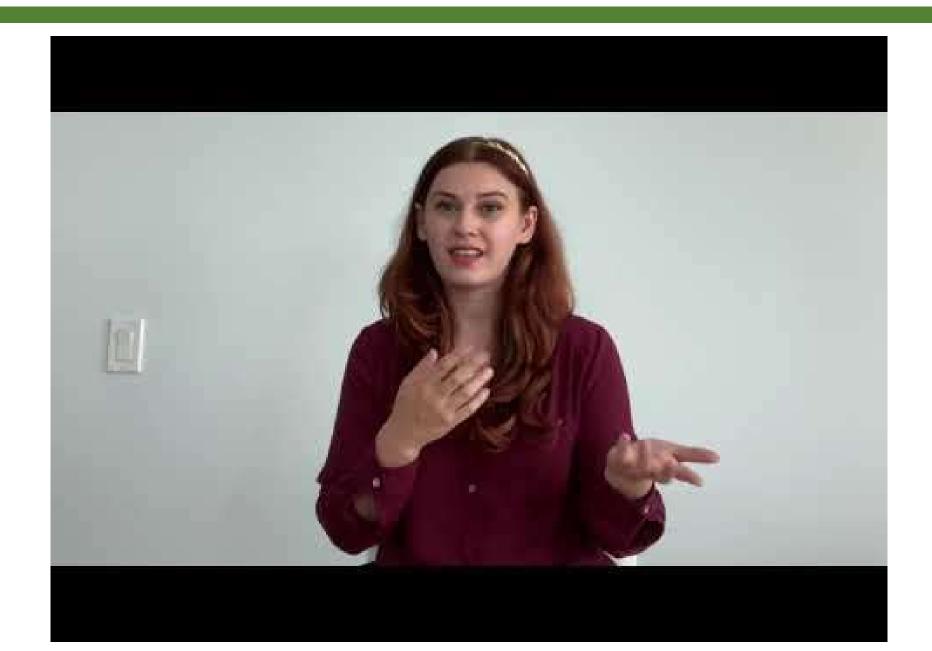
Epic Investment Services Corporate Overview





Epic's Testimonial

by Emily Nield, Senior Sustainability Analyst



How to get started.

You need support, we have the knowledge.





Know your obstacles, build a plan

Do these points resonate with you?

- My utility costs are not clear to me
- Data management is overwhelming
- How to start a green team
- Capital to improve my energy efficiency
- Lack of recognition for my sustainability efforts

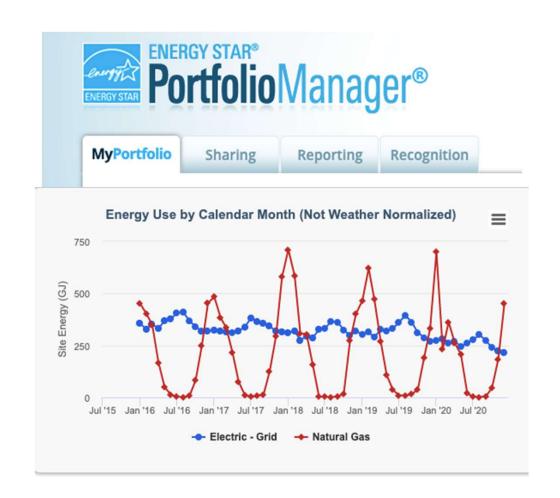
We support you solving your challenges and give you the tools to expand your opportunities.



Energy Star Portfolio Manager (ESPM)

- NRCan supported North America wide platform
- Compare your energy use with other buildings in Canada
- Earn Energy Star certification
- Be a leader in understanding your energy, water and waste management.

ClimateWise Challenge will support you to input your data in Energy Star Portfolio Manager





How ESPM will identify saving money

You can't Manage what you don't Measure

- Using Analysis of your data informs opportunities to improve energy reduction
- Consult with operations/equipment experts to optimize building operations efficiency
- Work with building owners/tenants/employees to adopt a culture of sustainable behaviour
- CREATE a sustainable brand for community recognition

SAVE money of by reducing energy usage costs



Collaboration of landlord/tenant offers proven, measured financial and environmental benefits—to the stakeholders involved in its implementation, and to the planet.

Generate an attractive ROI.

Gain a competitive edge.

It is proven.
It is environmentally critical.

Company	Leased SF		Energy Reduction	Total savings	ROI	Payback period
Reed Smith	117,000	\$1.31	44.5%	\$1,126,498	410%	2.2 years

"Generally, there is a strong sense of pride in playing a part in such a meaningful project, and the employees are proud to occupy facilities which strive to use forward-thinking energy conservation protocols," said Pat Hiltibidal, Reed Smith's firmwide chief of office services.

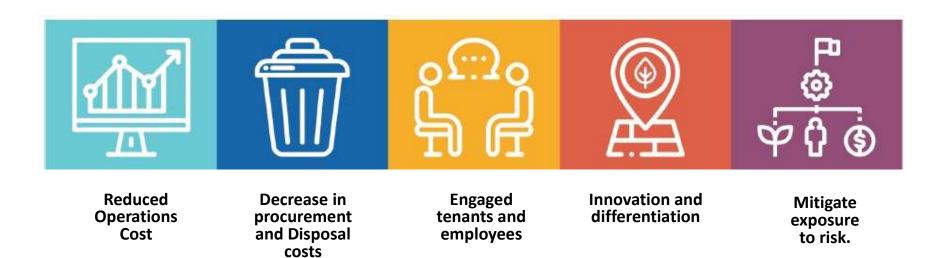


Circular Economy practices



Circular economy, or circularity, proposes an alternative economic model where products and materials are designed in a way that eliminates waste completely, keeping resources in a continuous cycle of use. This eliminates pollution and the need for resource extraction, supporting a healthier and regenerative natural environment.

It delivers the following benefits for property managers, operators, and owners:





Green teams are fun!

How Will This Action Create Change?

By forming a green team at your company, you will:

- Build a network of like-minded individuals who can use their diverse skillsets and experiences to maximize the team's impact.
- Relieve the stress of having to organize and execute your ideas alone.
- Gain insight on different perspectives when brainstorming sustainability ideas.
- Forge a new and exciting path that will open opportunities for environmental action at your company.

Step 1:

Build the core group

Step 2:

Determine priority areas

Step 3:

Establish team structure

Step 4:

Outline process for selection and recruitment

TIP:

Get senior leader support



Lease agreements, a barrier to sustainability

- Gross and Triple Net leasing agreements often results in split incentives between the landlord and tenant
- Investments that result in energy savings and GHG reductions has one party paying for improvements (landlord) while the other party receives the benefits of reduced utility costs (tenant)
 split incentive







Problem of who benefits

Gross Lease:

Tenant pays a fixed amount each month, which covers the basic ongoing expenses.

The landlord takes care of everything and the rate does not change.

No incentive for tenant to make energy improvements.

Triple net lease (net):

On top of a base rent, the tenant is responsible for all costs incurred with the space's operation, including energy.

No incentive to make large capital energy improvements.





Green Lease offers balance



- Most large commercial real estate management firms are starting to adopt green leases in order to address this issue.
- Contractual obligations to overcome the misaligned incentives between tenants and landlords enable splitting of costs and benefits in a balanced way.
- Green lease clauses clearly incorporate sustainability concepts, and assign costs and benefits of sustainability improvements.





Benefits of a Green lease

Higher productivity and better occupant health

Promotion of a culture of sustainability among all building users

Reduced environmental impacts

Savings through reduced energy costs

Higher future rent and building occupancy rates

Improved public image and marketing tools for both landlord and tenant

REALPAC offers a Green Lease Guide







Get started to save \$



Conducting an energy-efficiency walk-through

- No cost
- Revels low-cost savings
- Vendors may participate and share expertise 3.

Use the energy-efficiency walk-through to answer 3 questions

- What equipment is consuming energy and costing money when it isn't needed?
- What equipment is wasting energy working harder than necessary?
- 3. Is any equipment nearing end-of-life replacement?

See the video on the next page for details.





Save on Energy - Conducting an energy-efficiency walk-through

Looking for funding information?

Canada Infrastructure Bank (CIB) - infrastructure retrofits

- financing for minimum \$25M investment

Natural Resources Canada - Implement ISO 50001

- up to \$40,000

IESO

Energy Performance for Multi-site Business - **Four cent per kilowatt-hour** (\$0.04/kWh) of savings

Identify, implement and validate energy efficiency projects

- support only

Retrofit Program - **Up to \$400 for every kilowatt** saved Small Business Lighting Program – **up to \$2k**



Enbridge:

Commercial Retrofit Program - \$0.10 per m3 of natural gas saved, up to \$100,000

Comprehensive Energy Management Program – gain understanding

RunitRight Program for Business Partners – **up to 100% costs** Savings by Design for Commercial Builders – **Up to \$60K**



Get recognition for your Climate Action

We're here to support you





Our Provincial partner











The Journey's end - Recognition

ENERGY STAR Tenant Space is recognition for sustainability efforts in leased office space.





Create a more energyefficient/sustainable workplace

Bottom line savings on business operations.

Demonstrate corporate leadership

Align with customer demands for more environmentally conscious products and services.

Recognition for your business

ENERGY STAR Tenant Space recognition at the fall York Region Sustainability Awards 2022 and 2023.



ClimateWise Building Challenge



Our vision is to facilitate, support, and mentor York Region building owners and business to reach energy and greenhouse gas reduction targets.

We provide you with a plan of action with detailed resources and technical support throughout the competition. This includes energy saving tips, energy benchmarking tools, and advice from industry leaders.

Benefits you can expect

Bottom-line Cost Savings

Migrating to a sustainable business model is an opportunity for innovation, cost savings and increased profitability.

Stay on Top of Available Incentives

More incentives and regulatory opportunities will be available to help your firm stay competitive.

Attracting and Retaining Top-tier Employees

Research suggests that employees are more inclined to work and stay at a firm with a good reputation with respect to environmental sustainability.

Engaging Employees

Build a culture of employee collaboration and enjoy the benefits of enhanced productivity.

Being Part of a Movement

Consumers and investors turn towards organizations that show a commitment to achieving emission reductions.



Webinar series to learn more

Wed, April 6 – 3-4pm:

Why building tenants should be thinking about Climate Risk

Wed, May 4 – 3-4pm:

Green leases: how to achieve cost savings and sustainability goals

Wed, June 1 – 3-4pm:

Better understand your energy consumption and what is driving your energy use

Wed, Sept 7 – 3-4pm:

Recognizing how Tenants contribute to sustainability of their buildings

Wed, Oct 5 – 3-4pm:

Green retrofits that your Business can consider

Wed, Nov 2 – 3-4pm:

Innovative Building solutions for your energy saving strategy





Our Participants



Commercial Leaders:



















Municipal Leaders:





















Join the Challenge!





<u>ClimateWise Building Challenge | Registration (windfallcentre.ca)</u>

Supported by



An agency of the Government of Ontario Un organisme du gouvernement de l'Ontario

Questions



See slides in this section for more details



Connecting actions to energy savings

Vornado Realty Trust, a leader in sustainability and energy efficiency realized that energy use in common areas was going down but energy use in tenant spaces – accounting for up to 70% of energy consumption – was staying flat.

Using their Energy Information Portal (EIP), they helped tenants understand their energy consumption and make improvements to reduce usage.

Tenants were able to connect their actions to actual energy savings, gaining a way to understand the impact of their behavior and motivation to improve.



Owner Challenge	Wanted to engage tenants in achieving and maintaining top energy and environmental performance across the portfolio.
Tenant Challenge	Lacked insight into their own energy consumption and needed a meaningful way to track usage.
Owner Benefit	Save energy costs by reducing energy use with smart facilities management and sustainable improvement, and to better serve tenants.
Tenant Benefit	This approach breaks down the figurative walls between landlord and tenant to benefit both and the environment.

Stronger Landlord-tenant relationships

Hines developed and launched an internally GREEN OFFICE program to measure and reward sustainable practices in the firm's 200 offices worldwide.

Tenants began to ask property teams for ways to improve sustainability in their leased spaces.

Hines recognized the value of interacting with tenants to foster stronger landlord-tenant relationships, as well as the energy and environmental benefits for the company's portfolio



Owner Challenge	Seeks opportunities for positive interactions with tenants that deepen relationships, enhance customer service, and achieve sustainability objectives
Tenant Challenge	Seeks help to make their office space more sustainable, validate existing practices, and gain recognition for achievements
Owner Benefit	Use recognition as a powerful tool to motivate tenants to take efficiency and other sustainability actions.
Tenant Benefit	Help to build strong landlord-tenant relationships. Tenants are eligible to be awarded the GREEN OFFICE designation

Collaboration toward sustainability

Collaboration of landlord/tenant offers proven, measured financial and environmental benefits—to the stakeholders involved in its implementation, and to the planet.

Leasing brokers are influential tenant advisers.

Tenants create demand for energy-efficient, high-performing space.

Building owners supply highperformance buildings that help tenants meet their energy performance and financial goals.

Consultants (e.g., architects, engineers, project managers, energy consultants, and contractors) provide the expertise to optimize energy performance and present the technical options and economic case for a comprehensive, costeffective, and high-performance space.

Generate an attractive ROI. Gain a competitive edge.

It is proven. It is environmentally critical.

When implemented in ten pilot fit-out projects, the Tenant Energy Optimization process yielded impressive energy and cost savings:

Company	Leased area (SF)	Added cost (\$/SF)	Energy reduction	Total savings	ROI	Payback period
Bloomberg	20,000	\$3.06	10.5%	\$173,880	140%	2.5 years
Coty Inc.	80,000	\$0.71	30.7%	\$716,148	328%	2.7 years
Cushman & Wakefield	7,500	\$3.25	47.5%	\$87,862	359%	1.7 years
Estee Lauder Companies	10,000	\$1.29	12.1%	\$15,862	42%	3.7 years
Global Brands Group	137,000	\$0.98	11.8%	\$438,090	126%	4.6 years
LinkedIn Corp.	36,000	\$2.63	31.3%	\$153,000	23%	6.4 years
NYSERDA	15,200	\$2.42	39.0%	\$188,017	179%	3.6 years
Reed Smith	117,000	\$1.31	44.5%	\$1,126,498	410%	2.2 years
Shutterstock	8,600	\$2.63	22.9%	\$369,897	40%	6.1 years
TPG Architecture	40,000	\$2.01	21.6%	\$275,372	162%	3.2 years

Circular Economy practices



Circular economy, or circularity, proposes an alternative economic model where products and materials are designed in a way that eliminates waste completely, keeping resources in a continuous cycle of use. This eliminates pollution and the need for resource extraction, supporting a healthier and regenerative natural environment.

It delivers the following benefits for property managers, operators, and owners:



Reduced Operations Cost



Decrease in procurement and Disposal costs



Engaged tenants and employees



Innovation and differentiation



Mitigate exposuse to risk.

A survey from input from 120 industry members indicates that the following circular economy strategies are currently being implemented:



87%
Preventative
Maintenance



76% Building automation system



57% Composting



54%
Donate/Share
furniture at end of life

Suggested practices:

- Offering occupants sharing or re-use opportunities
- Incorporating circular specifications in procurement
- Selecting equipment with the lowest life cycle impact
- Select renovation products with recyclable content and low embedded carbon
- Return materials/products to supplier
- Select repairable products
- Lease products instead of purchase
- Third-party certification on electronics (e.g., EPEAT)

Reference document used: 2021 Circular Economy Guide – BOMA Canada

Funding considerations



Who	Title	Criteria	Incentive	Link
Canada Infrastructure Bank (CIB)	Commercial Building Retrofits Initiative	Infrastructure retrofit for Existing En ergy Service Companies	Accessible debt financing for minimum \$25M investment by CIB	<u>here</u>
Natural Resources Canada	ISO 50001 program	implement ISO 50001	up to 60% to a maximum of \$40,000 per facility.	<u>here</u>
Natural Resources Canada	Programs listed below	Many options	See below	<u>here</u>
Enbridge	Commercial Retrofit Program	Natural Gas	one-time incentives of \$0.10 per m3 of natural gas saved, up to \$100,000	
Enbridge	Comprehensive Energy Management Program	Education	Gain understanding of key energy drivers	
Enbridge	RunitRight Program for Business Partners	Investigating, implementing and monitoring operational efficiency solutions	up to 100% of the costs	
Enbridge	Savings by Design for Commercial Builders	Designing sustainability into construction projects	up to \$60,000 in incentives	
Enbridge	Fixed Incentives	Demand Control Ventilation – incl. Kitchen, estratification Fans		
IESO	SAVE ON ENERGY	ENERGY PERFORMANCE FOR MULTI-SITE BUSINESSES	Four cent per kilowatt-hour (\$0.04/kWh) of savings per year for up to 4 years	
IESO	SAVE ON ENERGY	IDENTIFY, IMPLEMENT, and VALIDATE energy efficiency projects	Will help organizations	
IESO	SAVE ON ENERGY	RETROFIT PROGRAM	Up to \$400 for every kilowatt saved for lighting measures and up to \$800 for every kilowatt saved for non-lighting projects	
IESO	SAVE ON ENERGY	SMALL BUSINESS LIGHTING PROGRAM	up to \$2,000 worth in energy-efficient lighting upgrades	

Funding considerations



Who	Title	Criteria	Incentive	Link
Natural Resources Canada	Programs listed below	Many options	See below	<u>here</u>
Union Gas	Meters	Funding for measures and equipment that reduce a business' natural gas consumption	50% of meter cost, up to \$3,500	
Union Gas	Space Heating Programs - Energy Recovery	Ventilators (ERV) and Heat Recovery Ventilators (HRV)	from \$400-\$1,500 per unit	
	Water Heating Programs - Ozone Laundry	Reducing hot water consumption by up to 85%, reducing water use by up to 30% and reducing chemical use by 10%	from \$1,000-\$6,000 per unit	
Union Gas	Space Heating Programs	Demand Control Kitchen Ventilation Unit	\$1,300 per unit	
Union Gas	Space Heating Programs	Condensing Make-up Air (MUA)	\$500-\$2,600 per unit	
Union Gas	Space Heating Programs	Air Curtains	\$250 per unit: >= 48 sq. ft. To \$1,500 per unit: > 100 sq. ft.	
Union Gas	Natural Gas - New & Retrofitted Equipment and Process Optimization	Funding for measures and equipment that will reduce a business' natural gas consumption and improve its energy efficiency	Cannot exceed 50% of the project cost.	
Enbridge Union Gas	Fixed Incentives	Demand Control Ventilation – incl. Kitchen, estratification Fans		