

Making a Difference

Energy Efficiency in Ontario

2019-2020 Interim Framework Results



Save on Energy celebrates 10 years in 2021. More than 250,000 Ontario residents and businesses have relied on Save on Energy programs to better manage their energy use.





Everyone benefits from energy efficiency

It helps:

- ✔ **enable consumers to better manage their electricity bills**
- ✔ **support businesses in their efforts to stay competitive**
- ✔ **drive economic prosperity**
- ✔ **defer building new power plants and transmission lines**
- ✔ **lower electricity system costs**

2019-2020 Save on Energy highlights



\$353 M

Invested in Energy
Efficiency Projects



1.5 TWh

Total Electricity Savings



186.4 MW

Total Demand Savings



The electricity saved is equivalent to powering
a city the size of Oshawa for one year

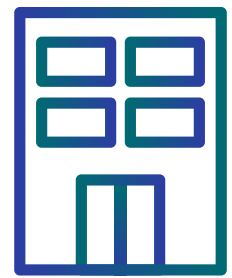
2019-2020 Save on Energy Programs

- ✓ Retrofit
- ✓ Small Business Lighting
- ✓ Energy Manager
- ✓ Process and Systems Upgrade Program
- ✓ Energy Performance Program
- ✓ Home Assistance Program
- ✓ First Nation Programs
- ✓ Local Program Fund



Retrofit program

2019-2020 RESULTS:



11,128
Businesses Supported



1.2 TWh
Total Electricity Savings



144.7 MW
Total Demand Savings

Helping business unlock energy savings
and improve productivity, employee comfort
and customer experience



Case Study: Dream Office



“The IESO has been an important partner for us to achieve our sustainability goals. Leveraging the Save on Energy program enabled a pathway to smarter, more efficient and higher performing buildings.”

LEE HODGKINSON

VP, Technical Services, Sustainability & ESG
Dream Office

Dream retrofitted the lighting at 11 office buildings in downtown Toronto, replacing inefficient incandescent and fluorescent bulbs and magnetic ballasts with new energy-efficient and long-lasting LED lighting.



Dream is one of Canada's leading real estate companies, focused on impact investing and sustainable buildings



Through the incentives received from Save on Energy, Dream was able to justify a larger investment and retrofit scope, including a smart lighting control system that can be controlled using a mobile device and provides human-centric lighting



2M+

Square feet of existing office space retrofitted in a major lighting program



4,947 MWh

Total Electricity Savings



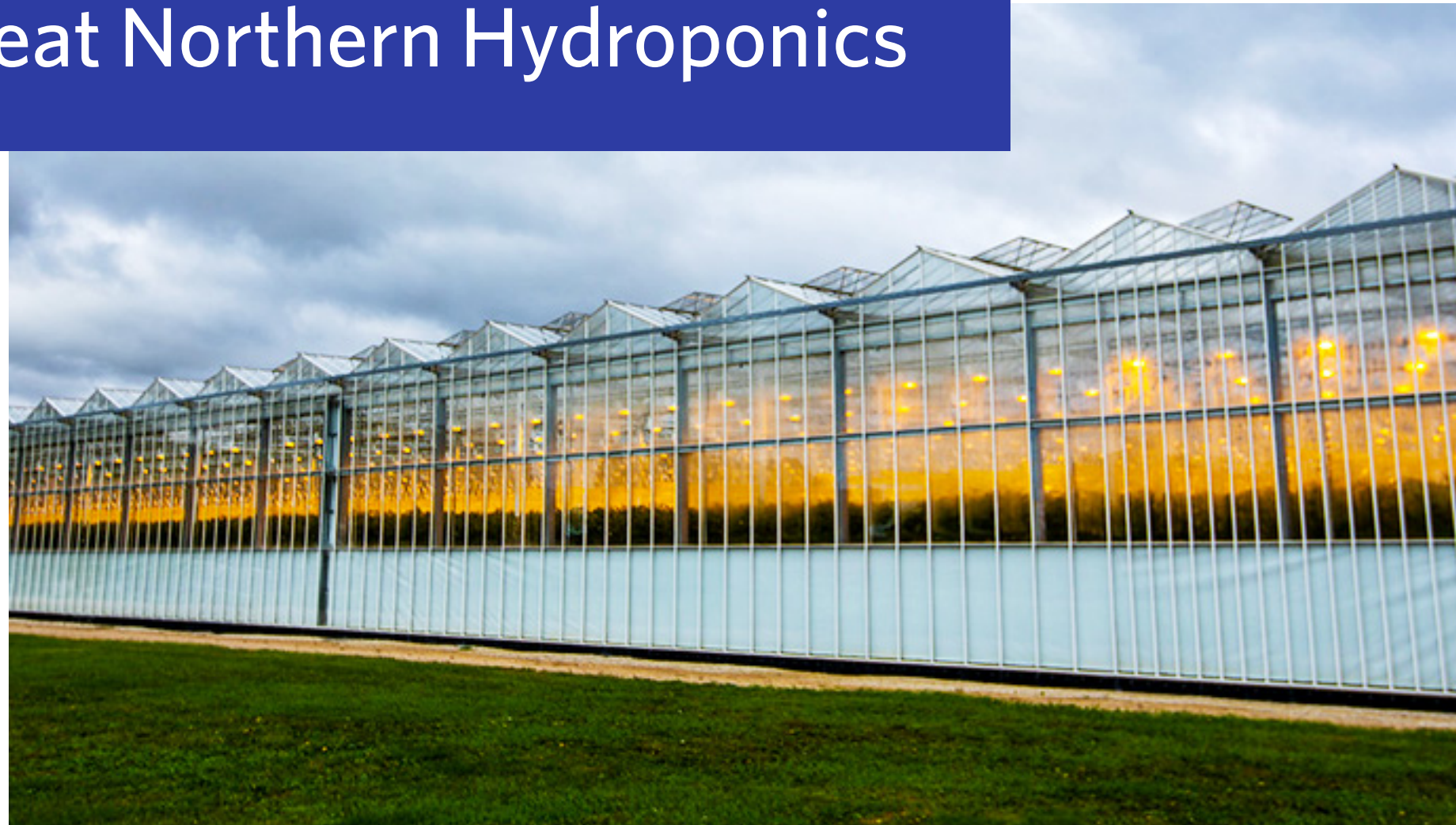
Through direct IESO funding, Dream also hired a full-time Energy Manager to identify energy-saving capital projects and make operational improvements



945 kW

Total Demand Savings

Case Study: Great Northern Hydroponics

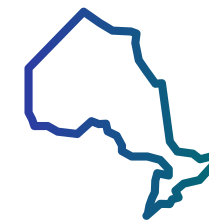


“We were the first tomato grower to light a crop commercially in this area. If it’s a clear sky, the lighting requirement goes down to 50 per cent.”

GUIDO VAN HET HOF

President and General Manager
Great Northern Hydroponics

This project is part of an energy-efficiency strategy that also includes measures such as energy curtains and an automation system to control light and heat, which adjusts according to available sunlight.



70-acre

Facility located in
Kingsville, Ontario



\$150,000

Expected annual savings in
energy costs by replacing
half their high pressure
sodium (HPS) lights with
high-performance LED fixtures



10

Varieties of tomatoes

Small Business Lighting program

2019-2020 RESULTS:



6,826
Businesses Supported



47.2 GWh
Total Electricity Savings



11.6 MW
Total Demand Savings

Providing small businesses with up to \$2,000 to increase visibility and safety and help reduce energy costs



Energy Manager program

The Energy Manager program is the largest of its kind in North America, with trained energy-efficiency professionals helping large organizations save energy and drive Ontario's competitiveness

2019-2020 RESULTS:



195
Employed



46.6 GWh
Total Electricity Savings



5.0 MW
Total Demand Savings



Other specialized support for large energy consumers



Energy Performance Program:
performance-based incentives to drive
change and deliver results



Process and Systems Upgrade:
support for complex industrial projects

Case Study:
Peel District School Board



“The IESO’s energy incentive programs have helped PDSB reduce our energy costs and our carbon footprint, as well as make progress on our environmental and social equity goals.”

SHAHID NAEEM P.ENG. PMP
Manager, Energy & Sustainability
Peel District School Board

The Energy and Sustainability department has been utilizing the Save on Energy incentive programs to help fund energy efficiency projects for several years, including the Energy Performance Program.



155,000

Students in kindergarten to grade 12



12 GWh

Total electricity savings over three years



259

Schools operate in the municipalities of Brampton, Caledon and Mississauga



Work included the installation of LED lighting, lighting controls and building automation system upgrades, among other things



41

Participating sites/buildings

Case Study: Newmont Corp.

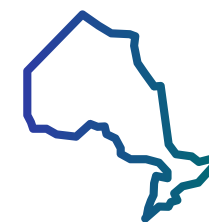


“With support from Save on Energy, we achieved an industry-first advanced electrification, and are on our way to eliminating diesel particulate matter from the underground environment. The project benefits will help us reduce energy costs and protect employee health while minimizing impacts to the environment.”

JOHN MULLALLY

Country Manager and Senior Director, Sustainability and External Relations
Newmont Corp.

Borden's entire fleet of underground vehicles and heavy equipment will be either electric or battery-powered in place of conventional diesel-powered equipment and features state-of-the-art health and safety controls, and digital mining technologies and processes.



Located near Chapleau, Ontario, Newmont's Borden mine came into production in October 2019



Newmont received support from the IESO's Save on Energy programs



9 GWh

Expected annual energy savings resulting from an innovative “Ventilation On Demand” project that limits ventilation to when and where it is required

Home Assistance Program

Support for income-eligible consumers to reduce bills and increase home comfort with energy-saving upgrades at no cost to the participant

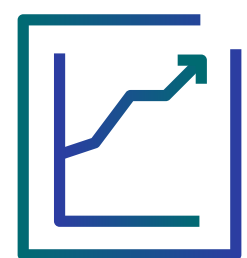
2019-2020 RESULTS:



22,859
Homes Supported



19.6 GWh
Total Electricity Savings



1.9 MW
Total Demand Savings



First Nations Conservation Program

Save on Energy offers First Nation communities specialized programs that reduce costs, improve home comfort and reduce reliance on fossil fuels

2019-2020 RESULTS:



823
Homes Supported



500 MWh
Total Electricity Savings





Support for Indigenous communities

Focused support for Indigenous communities through the First Nations Conservation Program and the Remote First Nation Energy Efficiency Pilot Program helps make electricity more affordable and improve health, safety and comfort

The Remote Pilot Program served four communities in 2019-2020:

- **Kasabonika Lake First Nation**
- **Wunnumin Lake First Nation**
- **North Caribou Lake First Nation**
- **Sachigo Lake First Nation**

12 more communities will be eligible in 2021

Local Program Fund

In addition to the suite of Save on Energy programs, communities are benefiting from tailored programming funded through the Local Program Fund and designed and delivered by local distribution companies. These programs help meet the needs of local areas and include incentives to businesses and residents for programs involving refrigeration, smart thermostats, block heater timers and more.



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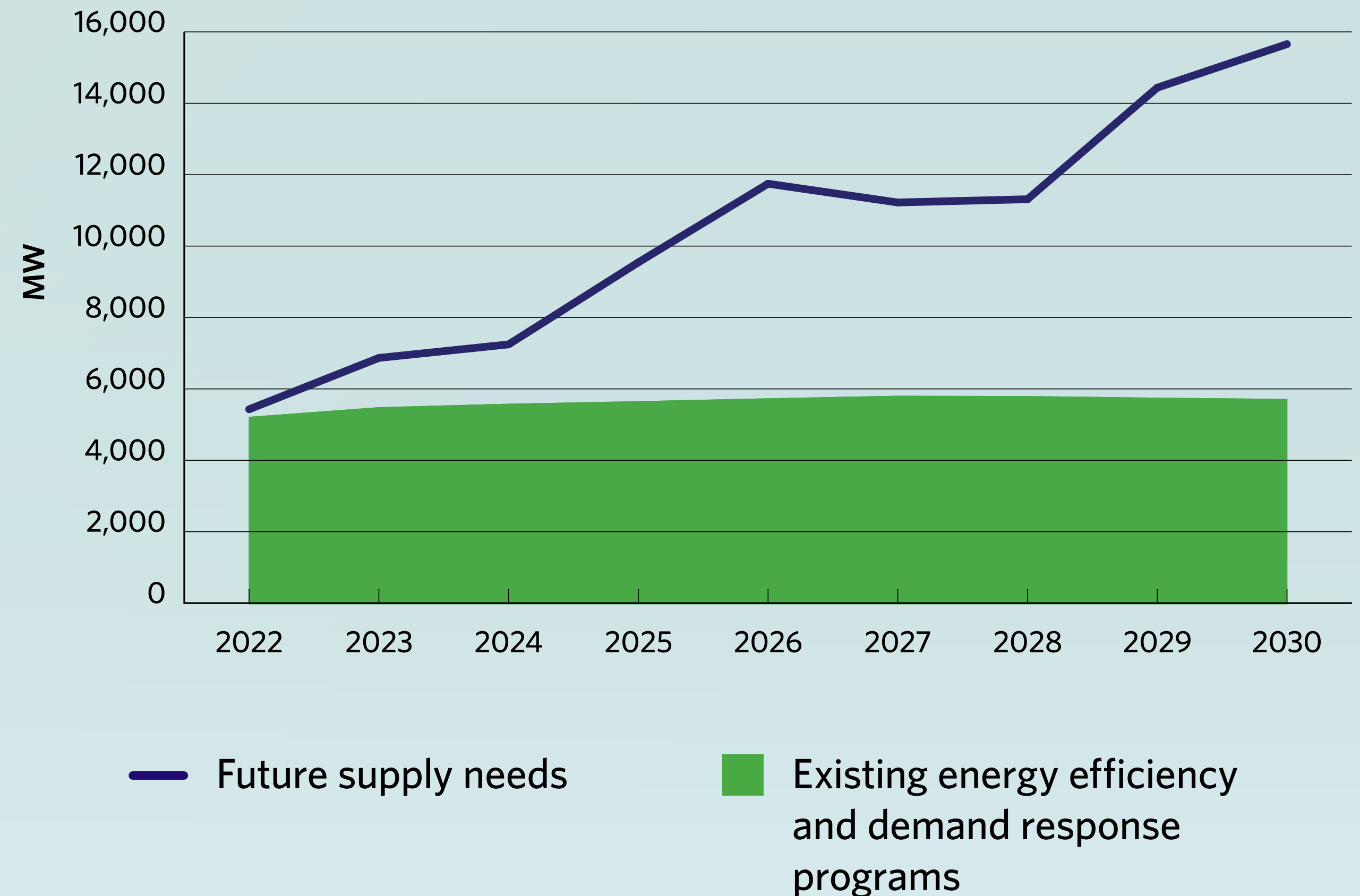
Local Programs Approved (2019-2020)



Why energy efficiency matters

At less than two cents per kilowatt-hour, it's Ontario's most cost-effective and enduring energy resource.

Consumers managing energy more efficiently will help address new supply needs with the potential for greater contributions as the IESO develops new approaches to energy efficiency.



Energy savings represented by the green shading is inclusive of the cumulative impacts from existing Save on Energy programs (including the current framework), Codes and Standards, Industrial Conservation Initiative (ICI), and other demand response programs.



Support for greenhouse owners

Energy efficiency is part of a broader solution to address increasing energy needs in southwestern Ontario.

The adoption of energy-efficient processes and technologies by businesses and communities has helped to reduce peak demand in the region by 10 MW.*

* Includes savings from 2015 Save on Energy programs and projects implemented with support from the IESO Grid Innovation Fund.

The current framework for energy efficiency

The IESO's 2021-2024 Conservation and Demand Management Framework will invest almost \$700 million to reduce peak demand by 440 MW and consumption by 2.7 TWh.

2021-2024 CDM programs focus on those who need them most, including businesses, First Nation communities and Income-eligible residents.



The future of energy efficiency is rapidly evolving to:

✓ enable customer-focused solutions

✓ competitively procure energy efficiency to ensure cost-effectiveness

✓ respond to changing needs, particularly in vulnerable communities

✓ contribute to Ontario's post-pandemic economic recovery, particularly for small businesses

✓ deliver even greater electricity system resiliency and ratepayer value



Learn more today:

[Current Save on Energy programs](#)

[First Nations Conservation Program](#)

[Ontario's energy needs](#)

[Energy Efficiency Auction](#)

[Grid Innovation Fund](#)



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SaveOnEnergy.ca

Appendix: Program Progress

Save on Energy programs contributed to 1.5 TWh of electricity savings and 186.4 MW of demand reduction from 2019 to 2020. The results demonstrate the value that energy efficiency provides for the electricity system and customers, and helps inform the future of conservation and demand management programs in the province. The data below includes customer participation and net-unverified contracted costs and savings. Totals include both committed and in-service project savings.

Final reported results will be provided later this fall with the posting of the Evaluation, Measurement and Verification (EM&V) reports. The EM&V process assesses the resource savings, cost-effectiveness and market impacts of each program. The reports will be available on the IESO website.

Program	Electricity Savings (GWh)	Demand Savings (MW)	Project Costs (\$M)	Incentive Costs (\$M)	Participation
Retrofit Program	1,187.9	144.7	47.7	145.3	11,128 projects
Small Business Lighting Program	47.2	11.6	3.7	11.2	6,826 projects
Energy Manager Program	46.6	5.0	1.3	14.0	195+ energy managers
Process and Systems Upgrade Program	196.5	20.2	4.7	46.0	106 projects
Energy Performance Program	9.9	1.2	0.4	1.1	22 facilities
Home Assistance Program	19.6	1.9	4.8	30.2	22,859 homes
Indigenous Programs	0.5	0.0	n/a	7.1	823 homes
Local Program Fund	8.7	1.8	n/a	18.0	44,779 projects*
IESO Central Services	n/a	n/a	18.0	n/a	
Total	1,516.9	186.4	80.6	272.9	
Interim Framework CDM Plan Target	1,429.4	189.5	80.5	272.9	
Actual vs. Target	106%	98%	100%	100%	

*756 projects from Refrigeration Efficiency Program, 42,621 homes from Community Conservation Program and 1,402 projects from Swimming Pool Efficiency Program
Changes to building codes and product standards help contribute to the province's conservation savings. These savings are covered in the IESO's [Annual Planning Outlook](#).

Support for customers

In response to the COVID-19 pandemic, in-person interactions between Save on Energy representatives and customers were temporarily suspended on March 16, 2020, including visits to home and businesses. Participants of the Home Assistance Program, Small Business Lighting, and First Nations Conservation Program were placed on wait lists and were contacted for appointments once it was safe to visit homes and businesses. Participation targets set in the CDM Plan by program were impacted due to the ongoing pandemic, but overall, the IF energy targets were achieved. New programs under the 2021-2024 CDM Framework will continue to provide opportunities to help those who need them most and can contribute to reduced energy costs as businesses and residents recover from the impacts of COVID-19.

Learn more at saveonenergy.ca/en/FAQs

