2016 Conservation Results Report





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This report covers the period from January 1, 2016 – December 31, 2016

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Message from the Vice-President Policy, Engagement and Innovation

Ontario continues to make steady progress towards its 2020 conservation target of seven terawatt-hours (TWh) of energy savings through Conservation First Framework (CFF) programs and an additional 1.7 TWh through the Industrial Accelerator Program (IAP). Electricity consumption was about nine percent lower in 2016 than it was 10 years earlier – due in large part to conservation programs, innovation, new technologies and ongoing changes in energy-use behaviour.



Combined net annual energy savings for 2015 and 2016 persisting to 2020 totaled 2,810 gigawatt-hours (GWh), representing a combination of 38 percent of the 2020 CFF and 10 percent of the 2020 IAP targets. Conservation continues to be Ontario's most cost-effective resource, achieving energy savings for our system at less than three cents per kilowatt-hour (kWh) in 2016, according to results verified by independent third-party evaluators.

There is much to be proud of in these numbers: first, it is heartening to know that in 2016, Ontarians saved enough electricity to power approximately 300,000 homes for one year. But more than this, the numbers point to a steady cultural shift. More people than ever understand the value of using energy wisely and say they know what to do to conserve. The conversation around saving energy is growing with an increase in the number of people saying they talked about energy conservation with friends and family in 2016 (65 per cent, compared to 58 in 2015 and 54 in 2014). This is an important point because the more people talk about energy conservation – and take action – the more progress we can make against our 2020 target. I'd like to take this opportunity to commend Ontario's local distribution companies (LDCs) for their role in keeping the conversation about energy efficiency alive with their customers, for delivering solid results in their communities, and for stepping up to the plate with ideas designed to harness emerging technologies and drive even greater energy efficiency. The IESO is committed to this kind of innovative thinking and will continue to look for ways to support it financially through the Conservation Fund and the LDC Innovation Fund.

If there is one thing the numbers clearly show, it's that Ontario's transition to a conservation culture is a collective experience – where individual savings ladder up to even bigger savings. Energy conservation is one of many ways that Ontarians are building a strong energy future, and the IESO will continue to work with all stakeholders, communities, partners and local distribution companies to ensure that, whatever the future holds, Ontario's electricity system will be ready, providing safe, reliable and sustainable electricity.

Sincerely,

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Results at a Glance

Energy Savings Delivered

2,810 GWh* Annual savings from 2015-2016 (persisting to 2020)

1,267 GWh* Energy savings

from 2016 45 percent of total 2015-2016 savings (persisting to 2020)

2,015 GWh*

Annual savings from Business programs from 2015-2016 (persisting to 2020)

770 GWh* Residential savings from 2015-2016 (persisting to 2020)

*Energy savings persisting to 2020 means verified savings expected to continue to December 31, 2020. Cost to Deliver Programs

\$819 million Program spending from 2015-2016 2016 Resources to Deliver Results

136 Individuals trained or certified through a comprehensive suite of energy management courses

9.7 million Save on Energy coupons redeemed

17 million Total energy-efficient products purchased

\$4.3 million Funding** paid through Conservation Fund Value for Money

2.10¢/kWh Cost in 2016 to deliver savings

Energy savings equivalent to energy used in approximately 300,000 homes

**The Conservation Fund has a \$9.5M annual budget, outside of the Conservation First Framework.

Conservation Program Achievements

In 2016, electricity consumption was about nine percent lower than it was 10 years earlier, due in large part to conservation programs, more energy-efficient building codes and product standards, innovation, new technologies and ongoing changes in the economy and energy-use behaviour.



Ontario Energy Actual Grid Demand 2005 - 2016



*Other includes: Save on Energy New Home Construction Program, Save on Energy Audit Funding Program, Save on Energy Existing Building Commissioning Program, LDC Local Programs, LDC Innovation Fund Pilot Programs, Conservation Fund Pilot Program

2016 Highlights

- Approved conservation and demand management plans were in place for all LDCs in the province. Each LDC has an allocated energy-savings target, which feeds into the overall seven TWh CFF target. LDC Conservation and Demand Management (CDM) Plans are posted on the "Conservation Delivery and Tools" page at ieso.ca.
- The Save on Energy Coupons Program achieved a record, delivering 428 GWh of 2020 Annual energy savings in 2016, more than doubling 2015 results. Residential customers who installed LED light bulbs accounted for 93 percent of coupons redeemed and 96 percent of program savings.
- Business customers completed 11,190 projects through the Save on Energy Retrofit Program. This program continued to be the highest performing program, achieving 567 GWh of energy savings in 2016 (or 45 percent of the annual savings). Business customers that installed efficient lighting represented 74 per cent of program savings.
- Energy savings through in-service projects under the IAP totalled 113 gigawatt-hours in 2016. Overall, the IAP has 35 percent of the 2020 target either contracted or already in service.
- Over 30 percent of IAP customers have contracted additional resources devoted to energy-savings projects through the Energy Managers program.
- Four LDCs have achieved at least 90 percent of their individual CFF 2020 targets and nine others are above 50 percent.

*Aboriginal Community Energy Plans are outside of the Conservation First Framework and are funded from a separate budget.

- Twelve different province-wide conservation programs were in place, as well as 11 local and regional programs, and 22 LDC Innovation Fund and Conservation Fund pilots tailored to the needs of specific communities.
- The IESO launched the new Energy Performance Program for Multi-Site Customers in December 2016. This pay-forperformance program offers business customers a financial incentive of four cents per kilowatt-hour for all savings in a building per year, for up to four years.
- Eleven Aboriginal Community Energy Plans (ACEP)* representing 19 First Nation communities were received, bringing the total number of ACEPs funded through the IESO since 2013 to 95. The overwhelming majority of completed ACEPs prominently feature conservation measures as key priorities. Proposed conservation initiatives include targeting the retrofit and upgrade of existing building stock, and integrating conservation principles into new builds (both residential and community buildings).
- In 2016, \$9.5 million in financial support was provided through the Conservation Fund to five initiatives for innovative conservation technologies, practices, research and programs that have the potential to deliver significant energy savings.
- The IESO completed an Achievable Potential Study (APS) to help inform electricity-efficiency planning and programs in Ontario. The results confirmed the allocated CFF target is achievable within the 2015-2020 timeframe and budget, and is a key input to the Mid-Term Review of the CFF and IAP. APS results are also used to help inform LDC program design and delivery, regional planning and long-term energy planning.

Innovation and Collaboration

The IESO is committed to exploring and providing financial support for demonstration projects that use emerging technologies to enhance the safety and reliability of Ontario's electricity grid, including renewable energy technologies and innovative program delivery methods.

IESO Conservation Fund

In 2016, the IESO committed \$9.5 million* through its Conservation Fund to five research and development initiatives that were identified as having the potential to deliver significant energy savings. These projects included:

- Expansion of CanmetENERGY's RETScreen Expert platform, a tool that enables electricity consumers in the Ontario commercial, institutional, industrial and agricultural sectors to quickly identify profitable energy-efficiency projects for a given facility. Based on the enthusiastic market response to RETScreen Expert, additional funds were provided in 2016 to: i) expand the library of built-in building models; ii) enable modelling of combined heat and power projects; and iii) facilitate the transfer in and out of the tool using the Green Button data standard or NRCan Portfolio Manager.
- A number of Local Achievable Potential Studies have been funded to better determine the potential for incremental conservation and demand management as an option to address local and regional needs. The studies will evaluate the technical and economic feasibility of potential "non-wires solutions," which could help avoid or offset the need for investment in new electricity system infrastructure.
- A project to test ways of increasing consumer response to time-of-use (TOU) rates through low-cost changes to bill presentation. This project will determine if bills that more effectively communicate consumption and TOU information can drive greater load-shifting and conservation behaviour. A key outcome is the *Introduction to Behavioural Economics for CDM Applications and Best Practices for Bill Design* guide, for use by LDCs.

The Conservation Fund provides financial support for projects that could lead to large-scale transformation in the marketplace or a change in consumer behavior, as well as projects that demonstrate the energy-saving potential of emerging technologies and test novel conservation concepts.

LDC Innovation Fund

The IESO also provided funding for 20 LDC-initiated pilot programs through a separate fund called the LDC Innovation Fund.

Through this fund, LDCs receive financial support for the design and market testing of new initiatives before they are offered as full-scale programs in the marketplace. LDCs can also apply for funding of joint activities where a collaborative approach to training, events, customer outreach, program design and delivery helps to minimize administrative costs.

The pilots funded in 2016 achieved over 14 GWh of verified annual energy savings persisting to 2020 and included the following:

EnWin Utilities: Residential Heat Pump Pilot

As many residents of the Little River Acres community rely on electric baseboard heating and also need summer cooling, incentives and financing options were offered to help reduce electricity consumption and associated costs. This pilot in the Little River Acres community sought to confirm the energy savings associated with ductless air source heat pumps, customer satisfaction with this technology and with the project incentives, as well as the effectiveness of baseboard heat controls paired with heat pump thermostats. Ninety-five heat pumps were installed in homes within the community, and initial survey results showed that 96 percent of participants were happy with the installation process and the performance of the technology.

Toronto Hydro: RTUsaver Pilot

The objective of this pilot was to reduce energy consumption by adding advanced controls to rooftop heating, ventilation and air conditioning (HVAC) systems at no cost to the participant. Thirteen facilities took part in the pilot, resulting in 500 megawatt-hours (MWh) of net savings verified through an independent third-party evaluation. Toronto Hydro used the lessons and results from the pilot to design a similar and broader program offering for its commercial customers.

 * The Conservation Fund has a \$9.5M annual budget, outside of the Conservation First Framework.

Hydro One Networks Inc.: Air Source Heat Pump for Residential Space Heating

This pilot promoted the use of air source heat pumps, a technology that draws heat from the outside air during the winter heating season, and rejects heat from the outside air during the summer cooling season. A total of 112 customers enrolled in the early phase of the pilot, of which 83 percent of participants indicated they were satisfied. Hydro One used the results of this pilot to pursue an air source heat pump pilot for low-income customers.

Local Program: Business Refrigeration Incentives Program

This program targeted electricity-savings opportunities through the installation of commercial refrigeration measures, which were identified through facility assessments. First offered as a local program by PowerStream (now Alectra) in 2015, it was later offered to all Alectra customers across its wider service territory. The program resulted in 928 MWh of net verified energy savings persisting to 2020, confirmed through an independent thirdparty evaluation. Given the demonstrated success of this local program, it has been implemented as a province-wide offering for all Ontario business customers.

2016 Reported Conservation Program Savings, Costs, and Participation*

The table below contains the electricity savings, administrative costs and participation reported in 2016 for each program. In some cases, savings for projects in certain programs may be reported in a different year than the costs. For example, savings from projects in the Conservation Fund and Existing Building Commissioning typically occur in the years following the costs.

	Energy Savings (GWh)	Program Costs (\$M)	Incentive Costs (\$M)	Participation
Residential Sector Programs				
Coupons	428	10	31	17,053,287 products
Heating and Cooling Incentive	76	5	33	136,617 HVAC measures
New Home Construction	2	1	3	130 homes
Home Assistance	8	3	7	5,066 homes
peaksaver PLUS	(150 MW of demand response capacity)	3	6	320,158 devices
Business Sector Programs				
Audit Funding	3	2	1	213 projects
Retrofit	567	38	102	11,190 projects
Small Business Lighting	11	3	3	2,421 projects
High Performance New Construction	19	4	13	180 projects
Existing Building Commissioning	0	1	0	0 projects
Process and Systems Upgrades	12	5	17	5 projects
Energy Managers	13	1	3	69 projects
Monitoring and Targeting	0	0	0	0 projects
Industrial Accelerator	113	4	19	25 projects
Other				
LDC Local Programs	2	10	0	
LDC Innovation Fund Pilots	14	5	0	
Conservation Fund Pilots	0	4	0	
IESO Central Services	n/a	22	0	
Other 2011-2014 Legacy Framework Projects	0	2	1	
Total	1,267	122	237	

*Totals may not sum due to rounding

People Delivering the Savings

In 2016, business customers completed 11,190 projects through the **Save on Energy Retrofit Program** and delivered over 567 GWh of energy savings or 45 percent of total 2016 energy savings persisting to 2020.

Transmission-connected customers from all sectors are actively participating in the IAP, bringing forward projects from lighting, to pump and motor upgrades, to largescale waste-energy recovery projects.

Brampton Brick and Glencore are two Ontario business customers that are finding innovative ways to save energy and operate more efficiently.

Brampton Brick

"Our annual electricity consumption used to be 22.3 MWh with a peak demand of 4.1 MW. Our average annual electricity costs were well over \$2 million, including our global adjustment costs," said Brad Duke, Brampton Brick's Senior Vice-President, Operations.

Brampton Brick, which produces 150,000 bricks a day from its plant northwest of Toronto, reined in electricity costs in several ways. In addition to developing a demand response strategy for shifting electricity load during peak times, the company upgraded its lighting, heating, air conditioning and compressed air systems. With each new project, the team turned to the **Save on Energy Retrofit Program**, delivered by Alectra, for financial incentives to offset some of the up-front costs for energy-efficiency upgrades. By replacing high-bay metal halide light fixtures with energyefficient, occupancy-controlled LED fixtures at the company's 400,000 square-foot facility, Brampton Brick reduced its lighting load by over 278 kilowatts and lowered annual consumption by about 2.3 MWh. An upgrade to the plant's rooftop HVAC unit yielded further savings of 2,187 kWh. These energy reductions represent energy savings of approximately 12 percent annually, not including the approximately 40 to 50 percent the company is saving monthly on global adjustment costs.

Glencore



"Without the financial incentives we received through the Industrial Accelerator Program, there's no way our new ventilation-on-demand project would have gotten off the ground," said Zachary Mayer, Glencore's Manager, Mine Technical Services. "But with the incentives, the payback is about two years, plus we have the benefit of substantial ongoing energy savings." Glencore's Kidd Mine in Timmins, Ontario, is the deepest base metal mine in the world. At depths equivalent to almost six CN Towers, ventilation is by far one of its highest operating costs. The company installed a system of occupancy sensors linked to radio frequency ID tags embedded in workers' cap lamps that alert a centralized logic control centre to workers' locations. Communication is instantaneous. When the control centre senses the presence of workers and equipment, it adjusts airflow louvres and fan blades to direct the flow of air to where it is needed. As work locations change shift by shift, airflow is adjusted in real time. When occupancy sensors detect that workers aren't present, the airflow turns off.

Mayer estimates that by regulating the flow of air to provide for the exact number of people who need it and for the equipment they're using, the mine is operating more efficiently, and the company is saving a little over \$2 million a year on energy.

Building Capacity for Conservation

The IESO's Energy Manager Program provides funding to eligible Ontario businesses to hire qualified energy managers to meet aggressive energy-savings targets, identify smart energy investments, secure financial incentives and nurture competitive advantages for participating businesses. Energy managers can identify both capital improvements that are eligible for incentive payments through Save on Energy programs and non-incented improvements for the organizations they support, such as the 69 projects completed in 2016. Here is a snapshot of the savings these embedded energy managers achieved within these service areas in 2016:



Net First Year Savings Energy (GWh)

Verified Results (End-User Level)

Training is a critical investment for companies that are looking to reduce their energy consumption and increase their energy efficiency. In 2016, the IESO provided funding for the following types of energy management training:

Certified Energy Manager

31 Energy Management professionals trained on energy management practices

Certified Measurement & Verification Professional

11 individuals trained on the practice of energy efficiency measurement and verification

Building Operator Certification

24 Individuals trained on connecting operation and maintenance activity to energy consumption

- Building Commissioning Professional Certification 5 energy management professionals trained on implementing and managing the whole building commissioning process in new and existing buildings
- Specialized Training

66 individuals received customized training tailored to the unique needs of their company and facility (including Compressed Air Challenge and Energy Efficiency Sales Training).

PROFILE Adam Murree, CEM, CEA, CMVP, Energy Manager, Atlantic Packaging

I've been an energy manager with Atlantic Packaging since 2012. Since I joined the company, we've reduced our electricity costs by 10 percent and lowered global adjustment costs by almost 50 percent.

My employment contract requires me to reduce consumption by two percent annually at each of our facilities, and that means I'm accountable every day for delivering results based on our company's energy strategy.



Communicating Conservation



In 2016, public awareness of energy conservation rebounded significantly in Ontario, after several years with no increase.

Consumers are thinking differently about energy efficiency, and the redesigned Save on Energy brand is helping to boost provincial conservation efforts. With the re-launch of the Save on Energy brand in June came an increase of seven percent in the number of people talking about using energy wisely, and a three percent increase in the number of people who recalled hearing about using energy wisely.

Efforts to drive support and awareness of electricity conservation continued at many levels in 2016, including TV and cinema ads,

newspaper and digital advertising and, most importantly, one-onone conversations with customers at events in 13 communities across Ontario. The marketing and education efforts supported the success of the Coupon program by driving 60,000 visits to the website where people were able to download coupons for lights and other ENERGY STAR®household items. Customers also responded well to the online education tool called Kilowatt Way (kilowattway.ca) that illustrates energy-saving opportunities in the home and community.

Indicators that underscore the importance of communicating conservation consistently include these survey results from Neilsen, an independent third party market research company:

88% of Ontario households

said that using energy wisely is worthwhile

90% of respondents said they are aware of what they need to do to use energy wisely

65%

of respondents said they talked about using energy wisely with family, friends and co-workers, compared to 58 percent in the year prior

69%

of respondents said they heard more about using energy wisely in 2016, an increase of three percent over 2015

83%

of people surveyed said they trust the Save on Energy brand to help them make energy-efficient choices for their homes

Conservation Program Evaluation and Cost-Effectiveness

To evaluate the value for money of conservation programs, the IESO assesses the costeffectiveness of conservation programs using two tests: the Program Administrator Cost (PAC) test and the Total Resource Cost (TRC) test. The PAC test measures the benefits (avoided energy and resource costs) as well as all costs associated with program delivery. The TRC test measures the benefits and costs from a societal perspective. For a program to be considered cost-effective, the benefits of the program must outweigh the costs at a ratio of greater than 1:0.

In addition to these tests, the IESO also uses the Levelized Unit Electricity Cost (LUEC) test to compare energy conservation programs with other electricity supply resources. This metric compares all costs associated with designing, delivering and evaluating a program to the amount of energy saved (¢/kWh). The IESO assesses cost-effectiveness at both the program level and at the portfolio level. The cost-effectiveness of programs tend to vary significantly by sector: programs targeting hardto-reach sectors such as low-income customers tend to be less cost-effective while programs targeting business and industrial customers tend to be more cost-effective. This holistic approach to measuring cost-effectiveness reflects the goal of serving all customer types.

2010 Cost-Effectiveness Ratio								
	Total Resource Cost (TRC)	Program Administrator Costs (PAC)	Levelized Unit Electricity Costs (LUEC) ¢/kWh					
Residential Sector Programs								
Coupons	18.56	4.67	1.23					
Heating and Cooling Incentive	1.36	2.05	5.05					
New Home Construction	0.27	0.61	14.08					
Home Assistance	0.94	0.81	7.75					
peaksaver PLUS*	n/a	n/a	n/a					
Business Sector Programs								
Audit Funding	2.04	0.59	10.97					
Retrofit	1.15	3.07	2.19					
Small Business Lighting	1.06	1.11	6.93					
High Performance New Construction	3.44	6.13	1.73					
Existing Building Commissioning	1.37	1.19	4.15					
Process & Systems Upgrades	0.88	1.95	3.64					
Energy Managers	2.57	7.21	0.79					
Industrial Accelerator	4.45	6.98	1.69					
Total	2.25	3.43	2.10					

2016 Cost-Effectiveness Ratio

*peaksaverPLUS evaluation underway; cost effectiveness results are not currently available.

Looking Ahead

The IESO is committed to innovation as a means of ensuring Ontario's electricity system is managed cost-effectively, safely and reliably for the long-term. For this reason, the IESO will continue to support and fund opportunities to accelerate the availability and adoption of innovative conservation and demand management practices and programs.

Further to this, the IESO will continue to develop plans and support project pilots through the LDC Innovation Fund that add momentum to Ontario's considerable energy savings to date. The IESO also will improve the availability and access to conservation programs targeted to low-income households, including the centralized delivery of the Home Assistance Program starting in January 2018.

In 2016, the IESO formally commenced the Conservation First Framework Mid-Term Review – an important marker in setting the next phase of conservation in the province. A final report will be submitted to the Minster of Energy in the first half of 2018 based on extensive engagement with LDCs, channel partners, customers and associations. As part of this process, the IESO will evaluate the results achieved to date through the 2015-2020 Conservation First Framework and the Industrial Accelerator Program, to see if these programs meet customer needs, to evaluate LDC budgets and their targets, and to ensure there is alignment with the province's climate change objectives. The IESO will also use the Mid-Term Review to identify how conservation programs can better meet the needs of local and regional electricity planning. In tandem with this review, the IESO will make recommendations for improving conservation programs and their availability for First Nations and Métis people, including the 10 communities served by unlicensed local distribution companies in northwestern Ontario known as Independent Power Authorities. Also, it will analyze the 90+ community energy plans funded through the IESO's Aboriginal Community Energy Plan program and engage extensively with Indigenous peoples province-wide, to identify ways to improve access to and uptake of provincial energy conservation programs.

Appendix

Long-Term Energy Plan Target: Conservation Savings

Savings from the Conservation First Framework and Industrial Accelerator Program contribute to meeting the province's longterm electricity savings target, as set out in the 2013 Long-Term Energy Plan (LTEP). The 2017 LTEP reaffirmed the provincial conservation target of 30 TWh of reduced electricity consumption in 2032.

In addition to the savings from conservation programs, electricity savings are achieved through predecessor IESO, OPA and LDC conservation frameworks, IESO Conservation Fund Pilots, Ontario Energy Board Time of Use Electricity Pricing Structures, other IESO Demand Response Programs, changes to codes and standards, as well as activities undertaken by other organizations in Ontario including natural gas distributor demand-side management programs and federal government conservation programs, all of which contribute to the long-term 30 terawatt-hour target.

Ontario is the first jurisdiction in Canada to include limiting greenhouse gas emissions and peak demand on the energy infrastructure as formal sub-objectives in its building code. Together with the increased energy-efficiency requirements of the code, these changes demonstrate Ontario's continuing leadership among its North America peers in making efficient energy performance integral to its building code.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Energy Efficiency	1,621	3,501	4,037	4,770	5,291	6,631	7,784	8,832	11,271	13,905	14,518
Demand Response	0	0	1	89	148	71	88	84	0	7	13
Total	1,621	3,501	4,037	4,859	5,439	6,701	7,872	8,916	11,271	13,911	14,532





	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Energy Efficiency	289	780	905	1,010	1,201	1,569	1,613	1,830	2,233	2,614	2,651
Demand Response	319	710	678	641	545	546	906	1,469	1,590	1,872	2,099
Total	608	1,490	1,583	1,651	1,746	2,115	2,519	3,299	3,823	4,486	4,750

Net Persisting Peak Demand Savings at the Generator Level (MW)



Conservation Programs



In 2016, LDCs delivered 12 province-wide residential and business conservation programs under the Save on Energy banner (saveonenergy.ca). Eleven local programs were developed and delivered by individual LDCs for their specific customer bases. These programs included:

Residential Province-Wide Programs

Save on Energy Coupon Program: Offers instant discounts on energy-efficient products to help residential customers save energy at home. Customers receive instant discounts at the point of sale for qualifying energy-efficient products at participating retailers.

Save on Energy Heating & Cooling Program: Offers incentives for homeowners to improve the overall efficiency of their HVAC systems. Homeowners receive incentives for upgrading their heating and cooling systems through an approved HVAC contractor.

Save on Energy New Construction Program: Encourages new home builders to build energy-efficient homes that provide home buyers with the benefits of increased comfort and energy-efficient features.

Save on Energy Home Assistance Program: Helps low-income qualified homeowners, tenants and social and/or assisted housing providers improve the energy efficiency of their homes.

Business Province-Wide Programs

Save on Energy Audit Funding Program: Offers customers incentives to complete energy audits, which assess the potential for energy savings through equipment replacement and improved operational practices.

Save on Energy Retrofit Program: Offers commercial businesses with prescriptive and custom incentives to help with up-front costs of purchasing energy-efficient equipment to improve the overall efficiency of buildings. Incentives cover up to 50 percent of eligible project costs.

Save on Energy Small Business Lighting Program: Helps qualifying small business customers with direct installation of free lighting upgrades.

Save on Energy High Performance New Construction Program: Provides design assistance and prescriptive, engineered and custom incentives for building owners and planners who design and implement energy-efficient equipment within their new space.

Save on Energy Existing Building Commissioning Program: Provides owners or lessees of chilled water systems located in commercial buildings with incentives for studies/investigations and implementation of projects identified in the report.

Save on Energy Process & Systems Upgrades Program: Helps industrial and large commercial organizations with complex systems and processes to identify, implement and validate energy-efficiency projects from start to finish.

Business Province-Wide Programs, continued

Save on Energy Energy Manager Program: Helps companies take control of their energy usage, by hiring a dedicated energy manager that identifies various options for saving energy in their facility.

Save on Energy Monitoring & Targeting Program: Provides incentives to install systems to provide energy consumption data to analyze and set energy-savings targets to companies with energy managers.

Local Programs

Adaptive Thermostat Local Program	Toronto Hydro; Enbridge Gas	Additional \$50 rebate to increase Enbridge's existing \$50 rebate for learning adaptive thermostats for homes.
Instant Savings Local Program	Canadian Niagara Power Inc.; Algoma Power Inc.	Free clothesline giveaway at customer engagement events.
Social Benchmarking Local Program	Hydro One; Alectra (formerly Horizon Utilities)	Home Energy Reports with energy consumption information and savings tips to drive energy savings in the home.
First Nations Conservation Local Program	Hydro One	Energy audit and direct install of eligible efficiency, health and safety, measures, and further education on home energy management for First Nations customers.
PUMPsaver Local Program	Toronto Hydro; Oakville Hydro	"Turn-key" retrofit for large, closed-loop hydronic heating and cooling systems in tall residential (MURBs) and commercial towers.
Business Refrigeration Incentives Local Program	Toronto Hydro; Alectra (formerly Powerstream Inc., Horizon Utilities; Hydro One Brampton)	Facility assessment, Energy Action Plan and direct installation of refrigeration measures for the small business sector.
Swimming Pool Efficiency Local Program	Toronto Hydro; Oakville Hydro; Hydro Ottawa; Renfrew Hydro; Burlington Hydro; Milton Hydro; Halton Hills Hydro	Point of sale discount for ENERGY STAR rated variable frequency drives (VFD) pool pumps for residential customers with swimming pools.
High Efficiency Agricultural Pumping Local Program	Niagara Peninsula Energy Inc., Hydro One	Point-of-sale discount on VFD pumps for agricultural uses.
OPsaver Local Program	Toronto Hydro; Oakville Hydro	Tools, coaching and performance incentives provided to building operators and employees in the institutional, commercial and industrial sector, to establish processes and practices to save energy.
Conservation on the Coast Home Assistance Local Program	Five Nations Energy (Attawapiskat, Fort Albany, Kashechewan)	Energy audit and direct install of weatherization, lighting and other measures for homes.
Conservation on the Coast Small Business Lighting Local Program	Five Nations Energy (Attawapiskat, Fort Albany, Kashechewan)	Lighting assessment and direct install of lighting measures for small businesses.



