

Conservation Progress Report

SECOND QUARTER

2016



Overview

The Independent Electricity System Operator (IESO) oversees a portfolio of electricity conservation and demand management programs that offer savings for all Ontarians. The IESO supports local distribution companies' (LDCs) delivery of programs to their residential, business, and industrial customers, and offers programs directly to transmission-connected customers.

This report highlights the achievements of Save on Energy programs and other conservation initiatives in the second quarter (Q2) of 2016. Preliminary results indicate 149 gigawatt-hours (GWh) net energy savings from LDC-delivered and non-LDC delivered programs and 203 megawatts (MW) of net peak demand savings were achieved.

The IESO's conservation and demand management efforts are guided by the Conservation First Framework, which spans over 2015-2020 and aims to achieve 7 terawatt-hours (TWh) of electricity savings through programs and initiatives offered to all customer segments. The framework also includes delivering 1.7 TWh of energy savings through the Industrial Accelerator program.

All Conservation results in this report are preliminary, unverified and subject to evaluation, measurement and verification prior to be reported as final, verified. For more information on the IESO's conservation and demand management programs, please visit saveonenergy.ca.

Conservation Highlights

The IESO has continued to lead the advancement of a culture of conservation in Ontario, working with the LDCs and others to connect customers to energy-efficient solutions. The following are highlights from Q2 2016:

Progress towards Savings Targets

Based on preliminary unverified results, LDCs have collectively achieved 1.27 TWh of net persisting energy savings persisting, representing 18% towards the 7 TWh provincial Conservation First Framework (CFF) target by 2020. Additionally, the Industrial Accelerator Program has achieved 0.155 TWh (9%) of the 1.7 TWh target for large transmission-connected customers to be achieved by 2020. With over 0.434 TWh under contract (24% of 1.7TWh target), savings are expected to increase as new projects come into service. 0.121 TWh was newly contracted in Q2 2016.

New Innovation

To date, 8 local LDC-programs and 30 LDC pilots have been approved. Toronto Hydro's PUMPSaver was approved as a local program in Q2 2016 after the successful completion of their 2015 pilot. PUMPSaver provides a no cost turn-key offer to business and industrial customers to improve the efficiency of their pump motors in hydronic systems. In addition, building off the success of PowerStream's local Business Refrigeration Initiative focused on commercial refrigeration upgrades, the IESO approved Enersource's adaptation of their own Business Refrigeration Initiative.

Save on Energy Retrofit Program Enhancements

New LED measures in the Retrofit program have been introduced. The new measures complement the existing offering of prescriptive lighting measures available through the Retrofit Program and ensure eligible measures and incentives continue to keep pace with the marketplace. In addition, in the effort to improve customer experience in the program, the Engineered and Custom track application process been simplified to include two distinct options, enabling the applicant to choose the track that best suits their business needs.

Residential Program Enhancements

The Residential working group is working to improve the customer experience of the Coupons and Heating and Cooling programs by investigating new measures, incentives and program delivery mechanisms. The working group has conducted a review and analysis of a variety of program concepts and held stakeholder consultations. Plans to ensure program continuity and smooth transitions to enhanced program delivery are currently in development.

Conservation Portfolio Results

Table 1 summarizes Q2 2016 conservation portfolio results. For the purposes of this report, LDC-delivered programs include those delivered by LDCs (directly or through contractors, retailers and aggregators). Non-LDC delivered program savings are attributed to the **INDUSTRIAL ACCELERATOR PROGRAM** and residential demand response (*peaksaver*®) customers enrolled pre-2011 who have not re-signed participant agreements with their Aggregator or LDC. All reported LDC activity and savings are based on projects reported and invoiced to the IESO only. Any pipeline projects that have an installation date in Q2 2016 are excluded from above.

Table 1: Conservation portfolio results*

**Savings reported at generator level; totals may not align due to rounding.*

	Q2 2016	2016	Q2 2016	2016
	Net energy savings (MWh)	Net energy savings (MWh)	Net peak demand savings (kW)	Net peak demand savings (kW)
LDC-delivered programs	90	163	9	20
Non-LDC-delivered programs	59	693	194	196
Total	149	232	203	216

Table 2 provides the net peak demand savings and net energy savings for the residential, business and industrial programs for the second quarter. Where a value of zero is shown, this indicates that no event, project, or activity associated with savings occurred this quarter.

Table 2: Net peak demand and net energy savings for residential and business programs*

Initiative	Delivery Agent	Net Energy Savings (MWh)		Net Peak Demand Savings (kW)	
Save on Energy LDC-delivered programs		Q2 2016	2016	Q2 2016	2016
Residential					
Heating and Cooling Program	Contractors	819	4,949	245	1,479
Coupon Program	Retailers	71,096	88,547	6,797	9,104
New Construction Program	LDCs	13	18	1	1
Home Assistance Program	LDCs	648	1,836	335	584
Commercial & Industrial					
Retrofit Program	LDCs	16,789	64,136	1,812	8,465
Small Business Lighting Program	LDCs	678	951	80	100
Existing Building Commissioning Program	LDCs	0	0	0	0
High Performance New Construction Program	LDCs	346	1,548	26	163
Audit Funding Program	LDCs	54	696	10	111
Process & Systems Upgrades Program	IESO	0	0	0	0
Monitoring & Targeting Program	LDCs	0	0	0	0
Energy Manager Program	LDCs	0	0	0	0
Non-LDC delivered programs		Q2 2016	2016	Q2 2016	2016
Industrial Accelerator Program	IESO	58,621	69,107	6,922	8,266
Residential/Small Commercial Demand Response	IESO	0	0	187,071	187,567

* Residential/Small Commercial Demand Response participation is based on available capacity as at June 30th, 2016 since program inception and is not indicative of incremental installations in Q2 2016

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Program Participation

Table 3 provides the participation results for the residential, business and industrial programs for the second quarter. Where a value of zero is shown, this indicates that no event, project, or activity associated with savings occurred this second quarter.

Table 3: Conservation program participation results

Initiative	Q2 2016	2016	Metric
Save on Energy LDC-delivered programs			
Residential			
Heating and Cooling Program	1,994	10,092	Installations
Coupon Program	2,093,910	2,530,407	Measures
New Construction Program	11	12	Homes
Home Assistance Program	479	1,339	Homes
Commercial & Industrial			
Retrofit Program	387	1,540	Projects
Small Business Lighting Program	88	108	Projects
Existing Building Commissioning Program	0	0	Projects
High Performance New Construction Program	7	20	Buildings
Audit Funding Program	9	43	Audits
Process & Systems Upgrades Program	0	0	Projects
Monitoring & Targeting Program	0	0	Projects
Energy Manager Program	0	0	Projects
Non-LDC delivered programs			
Industrial Accelerator Program	7	23	Projects
Residential/Small Commercial Demand Response*	328,451	328,451	Devices

* Residential/Small Commercial Demand Response participation is based on available capacity as at June 30th, 2016 since program inception

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