Hydro One Brampton Networks Inc.
175 Sandalwood Pkwy West
Brampton, Ontario L7A 1E8
Tel: (905) 840 6300
www.HydroOneBrampton.com

September 30, 2015

Delivered via email

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, Suite 2700
Toronto, Ontario
M4P 1E4

Dear Ms. Walli,

Re: Conservation and Demand Management 2014 Annual Report

As per Section 2.2.1 of the Conservation and Demand Management Code for Electricity Distributors, please find enclosed Hydro One Brampton Networks Inc.'s 2014 annual report for Conservation & Demand Management Annual Report. This report provides a review of the activities undertaken by Hydro One Brampton Networks Inc. from January 1, 2014 to December 31, 2014 in order to achieve its Conservation and Demand Management Targets.

A hard copy of the report will be mailed to the Board on the next business day.

If there are any questions or concerns with this report, please do not hesitate to contact Brian Baxter, Conservation & Demand Management Supervisor at 905-840-6300 ext. 3542.

Respectfully,

Scott Miller
Director of Customer Care
Hydro One Brampton Networks Inc.
smiller@HydroOneBrampton.com
905-452-550

Hydro One Brampton Networks Inc.

Conservation and Demand Management

2014 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2015

TABLE OF CONTENTS

Executive Summary

This annual report is submitted by Hydro One Brampton Networks Inc. ("Hydro One Brampton") in accordance with the filing requirements set out in the Conservation and Demand Management ("CDM") Code for Electricity Distributors, issued September 16, 2010, Board File No. EB-2010-0215 specifically, the Appendix C Annual Report Template, as a progress report and update to Hydro One Brampton's strategy filed with the Ontario Energy Board ("Board" or "OEB") on November 1, 2010. Accordingly, this report outlines Hydro One Brampton's CDM activities for the period of January 1, 2014 to December 31, 2014. It includes net peak demand and net energy savings achieved in 2011, 2012, 2013, and 2014, CDM program activities, successes and challenges.

Hydro One Brampton did not apply for any Board-approved CDM programs during 2014 however, as noted in the Guidelines for Electricity Distributors Conservation and Demand Management ("CDM Guidelines"), released April 26, 2012, the Board has deemed Time-of-Use ("TOU") pricing to be a province-wide Board-approved CDM program. The Ontario Power Authority ("OPA"), now Independent Electricity System Operator ("IESO"), is to provide measurement and verification on TOU. The TOU savings allocated to Hydro One Brampton's 2011 -2014 targets are 1,879 kW and 0 kWh.

In 2011 – 2014, Hydro One Brampton contracted with the IESO to deliver a portfolio of IESO-contracted province-wide CDM programs ("IESO Programs") to all customer segments including residential, commercial, institutional, industrial and low income. Most of these programs were rolled-out by the IESO in June 2011. In 2011 program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2011, Hydro One Brampton contracted with the IESO to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments including residential, commercial, institutional, industrial and low income. These programs were rolled-out by the OPA in June 2011. In 2011 Program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012, Hydro One Brampton focused on rolling out the remainder of the OPA programs while continuing to promote the in-market residential, commercial and industrial conservations programs to its customers. The residential programs generated 1.3 MW of incremental peak demand savings and 2.2 GWh of incremental energy savings in 2012. The commercial programs generated significant increases in energy and demand savings as a result of the Electricity Replacement Incentive Initiative compared with 2011 results, delivering 2.2 MW of incremental peak demand savings and 12.6 GWh of incremental energy savings in 2012. With the Industrial Program, the Demand Response Program is the only program producing demand and energy savings in 2012.The industrial programs delivered 2.8 MW of incremental peak demand savings and 0.07 GWh of incremental energy savings in 2012.

In 2013, Hydro One Brampton continued to promote the in-market residential, commercial and industrial conservation programs to customers. The residential programs generated 1.4 MW of incremental peak demand savings and 2.2 GWh of incremental energy savings in 2013. The commercial programs continued to generate significant increases in energy and demand savings as a result of the Electricity Replacement Incentive Initiative compared with 2012 results, delivering 3.2 MW of incremental peak demand savings and 18.6 GWh of incremental energy savings in 2013. The industrial programs delivered 3.8 MW of incremental peak demand savings and 0.10 GWh of incremental energy savings in 2013.

In 2014, Hydro One Brampton increased its promotion of in-market residential, commercial and industrial conservation programs to customers. The priority continued to be the focus on customers and Hydro One Brampton strove to provide energy services to customers that met and exceeded their expectations.

Residential programs were heavily promoted through a variety of marketing initiatives, including bill inserts, advertising, social media as well as various retailer and community events. Hydro One Brampton continued to have a strong community presence and is involved in local fairs, parades and civic events to educate and promote conservation awareness. Hydro One Brampton also leveraged its ongoing relationship with customers and hosted an Open House to promote conservation and engage with customers one on one. In addition to the continued efforts through the retailer events and the Peaksaver Plus program, Hydro One Brampton also placed increased emphasis on the Residential New Construction Program. In total, the residential programs generated 2.5 MW of incremental peak demand savings and 6.1 GWh of incremental energy savings in 2014.

The commercial programs continued to generate significant increases in energy and demand savings as a result of the Electricity Replacement Incentive Initiative. Through marketing efforts, advertising campaigns, channel marketing, information workshops and breakfast sessions and the on-site audit service, Hydro One Brampton's commercial customers had a good understanding of the programs available to them. Customers were taking advantage of the incentive programs and the results were apparent. Hydro One Brampton continued to build strong relationships with its commercial customers and will continue to position itself to be a trusted resource for energy advice for its customers. Hydro One Brampton's efforts resulted in increased results as compared with 2013 results, delivering 3.5 MW of incremental peak demand savings and 21.5 GWh of incremental energy savings in 2014.

With the Industrial Program, the Demand Response Program continued to produce demand and energy savings in 2014. Hydro One Brampton continued to work with all Demand Response Providers to ensure success in this program. Hydro One Brampton continued work with the commercial Key Account Managers (KAMs) for the large customers; the KAMs were responsible for producing an energy assessment report identifying potential conservation projects and driving projects for Hydro One Brampton customers. With increased emphasis on Energy Manager Initiatives, the industrial programs delivered 5.3 MW of incremental peak demand savings and 0.14 GWh of incremental energy savings in 2014.

Hydro One Brampton also generated energy and demand savings in 2014 through other programs. The Home Assistance Program generated 23 kW of incremental peak demand savings and 0.27 GWh of incremental energy savings. Program-enabled savings generated 361 kW of incremental peak demand savings and 2.3 GWh of incremental energy savings.

To date, Hydro One Brampton has achieved 17.6 MW of net incremental peak demand savings and 61.4 GWh of net incremental energy savings in 2014. A summary of the achievements towards the CDM targets is shown below:

Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by IESO	5.3	2.9	2.9	2.9
2012*– Verified by IESO	0.2	6.5	3.2	3.2
2013* – Verified by IESO	0.0	0.2	8.6	4.3
2014* – Verified by IESO	0.0	0.1	4.0	17.6
Verified Net Annual Peak Demand Savings Persisting in 2014:				**27.9**
Hydro One Brampton Networks Inc. 2014 Annual CDM Capacity Target:				**45.6**
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				**61.2%**

Net Energy Savings at the End User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by IESO	13.1	13.0	13.0	12.9	51.9
2012*– Verified by IESO	0.8	16.1	16.0	16.0	48.9
2013* – Verified by IESO	0.0	1.3	22.3	22.2	45.7
2014* – Verified by IESO	0.0	0.3	31.1	61.4	92.8
Verified Net Cumulative Energy Savings 2011-2014:					**239.4**
Hydro One Brampton Networks Inc. 2011-2014 Annual CDM Energy Target:					**189.5**
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					**126.3%**

**Includes adjustments to previous Years' verified results*

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

From the above table, Hydro One Brampton has achieved 27.9 MW or 61.2% and 239.4 GWh or 126.3% towards Hydro One Brampton's 2014 peak demand reduction target and energy consumption reduction targets respectively . The shortfall of peak demand targets were mainly due to late start of programs, cancellation of planned province wide programs including Direct Space Cooling since 2011. The overachievement of energy savings target was mainly due to Hydro One Brampton partnering with other LDCs, and working with the IESO and the Electrical Distribution Association ("EDA") to improve program effectiveness.

In 2015, the Conservation First Framework (CFF) for the period 2015-2020 will be implemented effective on date or pending approval of the CDM Plans submitted to the IESO by May 1, 2015. To ensure a smooth transition, most 2011-2014 Programs and Rules were extended into 2015 until the effective implementation start date of November 1, 2015 for Equipment Replacement Incentive Initiative and Process and Systems Upgrade Initiative under the Conservation First Framework. The remaining programs will have an effective implementation start date of January 1, 2016.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the OEB to establish Conservation and Demand Management ("CDM") targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of LDC to require LDC, as a condition of its license, to achieve 189.5 GWh of energy savings and 45.6 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister's directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the "Code") on September 16, 2010. The Code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Hydro One Brampton submitted its CDM Strategy on November 1, 2010 which provided a high level of description of how Hydro One Brampton intended to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the Board. This is the fourth Annual Report by Hydro One Brampton and has been prepared in accordance with the Code requirements and covers the period from January 1, 2014 to December 31, 2014.

Hydro One Brampton submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Hydro One Brampton for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results Report identified that the delay in the full suite of CDM programs being made available by the IESO, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I and II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the IESO to fund CDM programs which meet the definition and criteria for IESO-contracted province-wide CDM programs for an additional one-year period from January 1, 2015 to December 31, 2015. The Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand savings targets. Therefore, the main focus of the LDCs remains the achievement of CDM targets by December 31, 2014. However, in a letter issued on December 17, 2014, the OEB stated that "the board will not take any compliance action related to distributors who do not meet their peak demand targets."[1] Therefore, the main focus of the LDCs became the achievement of CDM energy savings targets by December 31, 2014.

Hydro One Brampton submitted its 2012 Annual Report on September 30, 2013,which summarized the CDM activities undertaken by Hydro One Brampton for the January 1, 2012 to December 31, 2012 period. The OEB's 2012 CDM Results report identified that the majority of LDCs achieved close to 20% of their net peak demand (MW) target from their 2012 results. However, LDCs generally advised the Board that meeting their peak demand (MW) target was not likely and that a shortfall was expected.

[1] Ontario Energy Board. (2014). Re: Conservation and Demand Management Report - 2013 Results Board File No.: EB-2010-0215. Toronto, Ontario, Canada. Retrieved September 28, 2015, from http://www.ontarioenergyboard.ca/oeb/_Documents/EB-2010-0215/Brdltr_2013%20CDM%20Report_20141217.pdf

LDCs collectively achieved approximately 8% of the energy savings (GWh) target, which was slightly below the 10% incremental annual savings needed each year to achieve the energy savings target. Overall, the cumulative results represented approximately 65% of the net energy target of 6,000 GWh.

The report identified that although there have been improvements to programs, there still remained some significant shortcoming to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. In particular, the change management process still required improvements to expedite enhancements to initiatives. The report also noted that certain initiatives may be reaching the point of market saturation and that new initiatives may need to be developed in order to take the place of the existing initiatives.

Hydro One Brampton submitted its 2013 Annual Report on September 30, 2014 which summarized the CDM activities undertaken by Hydro One Brampton for the January 1, 2013 to December 31, 2013 period. The OEB's 2013 CDM Results report identified that the majority of LDCs achieved close to 50% of their net peak demand (MW) target from their 2013 results. However, LDCs generally advised the Board that meeting their peak demand (MW) target is not likely and that a shortfall is expected.

In 2013, LDCs collectively achieved approximately 21% of the energy savings (GWh) target, adding to the overall cumulative result of approximately 85.7% of the net energy target of 6,000 GWh.

The report identifies that although there have been improvements to programs there still remains some shortcomings to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. In particular, the change management process still requires improvements to expedite enhancements to initiatives. The report also noted that certain initiatives may be reaching the point of market saturation and that new initiatives may need to be developed in order to take the place of the existing initiatives under the new framework.

1. Conservation Framework

1.1 2011-2014 Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Ontario Government ("Government") Directive to the OEB to establish CDM targets that would be met by electricity distributors recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, supports the provincial integrated supply plan, and addresses local distribution and transmission supply constraints. The past framework was intended to enable customers to benefit from a suite of both Board-approved and IESO province-wide programs and provide a portfolio that would meet both broad and specific customer needs.

The state of Board-approved programs and the current suite of province-wide IESO programs have limited CDM offerings to customers. This has produced limited savings and has restricted the associated opportunity for LDCs to meet their targets. The process to introduce changes to current program initiatives or to pilot new initiatives has been challenging, involving considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Challenges faced by LDCs in the 2011-2014 framework, such as overbuilt governance and unnecessarily excessive legal requirements and misalignment of control and risks, have been addressed by the new directive. However, there are still many challenges to overcome and the new CDM framework should address other challenges of the current framework and build on its strengths.

1.2 Conservation First Framework

LDCs are supportive of the Government's renewed commitment for CDM in Ontario. LDCs are committed to working with the Government, IESO, Natural Gas Utilities and other stakeholders to develop programs for the new framework for CDM in the Province.

Long-term commitment for CDM funding and confirmation of the role of LDCs have been provided in the Minister's directive dated March 31, 2014, allowing LDCs to maintain current program infrastructure, including LDC staff and third party contracts as required.

The commitment also provided LDCs the program extensions required for continuity into the Conservation First Framework which was critical for all customers.

2 Board-Approved CDM Programs

2.1 Introduction

In its Decision and Order dated November 12, 2010 in EB-2010-0215 and EB-2010-0216, the OEB ordered that, to meet its mandatory CDM targets, "Each licensed electricity distributor must, as a condition of its licence, deliver Board-approved CDM programs, IESO-contracted province-wide CDM programs, or a combination of the two".

At this time, the implementation of TOU pricing is the only Board-approved CDM program that is being offered in Hydro One Brampton.

2.2 TOU Pricing

2.2.1 Background

In its April 26, 2012 CDM Guidelines, the OEB recognized that a portion of the aggregate electricity demand target was intended to be attributable to savings achieved through the implementation of TOU pricing. The OEB establishes TOU prices and has made the implementation of this pricing mechanism mandatory for distributors. On this basis, the OEB determined that distributors will not have to file a Board-approved CDM program application regarding TOU pricing. The OEB deemed the implementation of TOU pricing to be a Board-approved CDM program for the purposes of achieving the CDM targets. The costs associated with the implementation of TOU pricing are recoverable through distribution rates, and not through the Global Adjustment Mechanism ("GAM").

In accordance with the Ministry directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB was of the view that any evaluation of savings from TOU pricing should be conducted by the IESO for the Province, and then allocated to distributors. Hydro One Brampton will report these results upon receipt from the IESO.

In 2013, IESO retained the Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide advice on methodology, data collection, models, savings allocation, etc. The initial evaluations were conducted in 2013 with five LDCs – Hydro One Networks Inc., Toronto Hydro-Electric System Limited, Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc. and Newmarket-Tay Power Distribution Ltd. Preliminary results from these five LDCs were issued to the five LDCs involved in the study in August 2013 and are now publically available on the IESO website. Preliminary results demonstrated load shifting behaviours from the residential customer class.

Three additional LDCs were added to the study in 2014 – Cambridge-North Dumphries, PowerStream and Sudbury. Preliminary results from this study are planned to be issued to the eight LDCs in September 2014. The IESO released its verified results of TOU savings to Hydro One Brampton in September 2015. In 2014, the province saved 55 MWs, or 0.73% of residential summer peak demand, from TOU pricing.

2.2.2 TOU PROGRAM DESCRIPTION

Target Customer Type(s): Residential and small business customers (up to 250,000 kWh per year)

Initiative Frequency: Year-round

Objectives: TOU pricing is designed to incent the shifting of energy usage. Therefore peak demand reductions are expected, and energy conservation benefits may also be realized.

Description: In August of 2010, the OEB issued a final determination to mandate TOU pricing for Regulated Price Plan ("RPP") customers by June 2011, in order to support the Government's expectation for 3.6 million RPP consumers to be on TOU pricing by June 2011, and to ensure that smart meters funded at ratepayer expense are being used for their intended purpose.

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided in Table 1**Error! Reference source not found.**.

Table 1: RPP TOU Pricing Summary

	Prices (cents/kWh)		
Effective Date	**On Peak**	**Mid Peak**	**Off Peak**
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7
November 1, 2013	12.9	10.9	7.2
May 1, 2014	13.5	11.2	7.5
November 1, 2014	14.0	11.4	7.7

Delivery: The OEB sets the TOU prices; LDCs install and maintain the smart meters; LDCs convert customers to TOU billing.

2.2.3 TOU Initiative Activities/Progress

Hydro One Brampton began transitioning its RPP customers to TOU billing on July 1, 2011. At December 31st, 2014, 134,076 RPP customers were on TOU billing.

2.3 Hydro One Brampton's Application with the OEB

In 2010, in conjunction with Hydro One Networks Inc., Hydro One Brampton proposed six Board-approved CDM programs. These programs were expected to account for about 17% of Hydro One Brampton's demand and energy target. However, these applications were then withdrawn. Subsequently most of these programs (4 out of 6) were transferred to the OPA to make them available provincially. With the introduction of new provincial regulations and other changes, Hydro One Brampton decided not to reintroduce the remaining two programs (and other potential Board-Approval programs) in 2012. Hydro One Brampton did not submit a Board-Approved CDM program application to the OEB in 2014.

2.4 Hydro One Brampton's Application with the IESO's Conservation Fund

In 2013, the IESO introduced the Conservation Fund's Program Innovation stream to help meet Hydro One Brampton's interest in the development and launch of new local, regional and province-wide initiatives. The Conservation Fund's LDC Program Innovation stream fast-tracks LDC-led program design and the launch of successfully piloted initiatives prior to full scale deployment. By driving program innovation through the Conservation Fund, LDCs have the opportunity to both realize additional savings through the piloting and implementation of initiatives not currently addressed by the IESO portfolio and the means to test concepts for future local or province wide programs post 2014. As per the IESO, as of March 2014, three pilots have been contracted and are underway with Toronto Hydro and Niagara Peninsula Energy and ten others are in various stages of the contracting and development process.

In addition, building on LDC interest in social benchmarking services for the residential sector, in 2013 the Conservation Fund in collaboration with Hydro One, Milton Hydro and Horizon Utilities completed the procurement of three social benchmarking pilot projects. Beginning in 2014 these services will be offered to more than 100,000 customers for a one year period, with evaluation reports published shortly thereafter.

Hydro One Brampton did not submit a CDM program application to the IESO's Conservation Fund in 2014.

3 IESO-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective February 11, 2011, Hydro One Brampton entered into an agreement with the IESO to deliver CDM programs extending from January 1, 2011 to December 31, 2014. The programs included under this agreement are listed in Table 2 below. Further program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in or after 2011:

Table 2: IESO-Contracted Province-Wide CDM Program Initiatives

Initiative	Schedule	Date schedule posted	(LDC) in Market Date
Residential Programs			
Appliance Retirement	Schedule B-1, Exhibit D	*Jan 26,2011*	*All residential rate classes*
Appliance Exchange	Schedule B-1, Exhibit E	*Jan 26, 2011*	*All residential rate classes*
HVAC Incentives	Schedule B-1, Exhibit B	*Jan 26, 2011*	*All residential rate classes*
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	*Jan 26, 2011*	*All residential rate classes*
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	*Jan 26, 2011*	*All residential rate classes*
Retailer Co-op	n/a	*n/a*	*All residential rate classes*
Residential Demand Response	Schedule B-3	*Aug 22, 2011*	*All general service classes*
New Construction Program	Schedule B-2	*Jan 26, 2011*	*All residential rate classes*
Home Assistance Program	Schedule E-1	*May 9, 2011*	*All residential rate classes*
Commercial & Institutional Programs			
Efficiency: Equipment Replacement	Schedule C-2	*Jan 26, 2011*	*All general service classes*
Direct Install Lighting	Schedule C-3	*Jan 26, 2011*	*General Service < 50 kW*
Existing Building Commissioning Incentive	Schedule C-6	*Feb 2011*	*All general service classes*
New Construction and Major Renovation Initiative	Schedule C-4	*Feb 2011*	*All general service classes*
Energy Audit	Schedule C-1	*Jan 26, 2011*	*All general service classes*
Commercial Demand Response	Schedule B-3	*Jan 26, 2011*	*General Service <50 kW*
Industrial Programs			
Process & System Upgrades	Schedule D-1	*May 31, 2011*	*General Service 50 kW & above*
Monitoring & Targeting	Schedule D-2	*May 31, 2011*	*General Service 50 kW & above*
Energy Manager	Schedule D-3	*May 31, 2011*	*General Service 50 kW & above*
Key Account Manager ("KAM")	Schedule D-4	*May 31,2011*	*General Service 50 kW & above*
Demand Response 3	Schedule D-6	*May 31, 2011*	*General Service 50 kW & above*

In addition, results were realized towards Hydro One Brampton's 2011-2014 targets through the following pre-2011 programs:

- Electricity Retrofit Incentive Program
- High Performance New Construction
- ~~Toronto Comprehensive~~
- ~~Multifamily Energy Efficiency Rebates~~
- ~~Data Centre Incentive Program~~
- ~~EnWin Green Suites~~

As per the table below, several program initiatives are no longer available to customer or have not been launched in Table 3.

Table 3: Pre-2011 IESO Programs

Not in Market	Objective	Status
Residential Program		
Midstream Electronics	Encourages retailers to promote and sell high efficency televisions, and for distributors to distribute high efficiency set top boxes.	Did not launch and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	Encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Did not launch and removed from Schedule in Q2, 2013.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Did not launch and removed from Schedule in Q2, 2013.
Commercial & Institutional Program		
Direct Service Space Cooling	Offers free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Did not launch.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master CDM Program Agreement between LDC and the IESO includes a program change management provision in Article 3. Collaboration between the IESO and LDC commenced in 2011, and continued in 2012, 2013 and 2014, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allowed for modifications to the Master CDM Program Agreement and initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

3.2 Program Descriptions

Full descriptions of IESO-contracted province-wide CDM programs are available on the IESO's intranet LDC and additional initiative information can be found on the saveONenergy website at https://saveonenergy.ca. The targeted customer types, objectives, and individual descriptions for each program initiative are detailed in Appendix A. Discussion of LDC's experience with these programs is provided below.

3.2.1 RESIDENTIAL PROGRAM

Description: Provides residential customers with programs and tools to help them understand and manage the amount of energy they use in their home and help the environment.

Objective: To provide incentives to both existing homeowners and developers/builders to motivate the installation of energy efficiency measures in both existing and new home construction.

Discussion:

The addition of Light Emitting Diode ("LED") technology into the bi-annual retailer events in 2012 and the annual coupons in 2013, as well as LDC custom coded coupons, had a positive effect on consumer engagement and provided LDC with opportunities to achieve additional savings in their service territory. The Residential Demand Response program was the main residential initiative which drove savings for LDCs and was been well received by consumers eager to utilize an In-Home Display ("IHD") to help manage their energy consumption. Unfortunately, there were no savings associated with the Energy Display attributed to LDCs in the IESO's verified results to date. LDCs are anxiously waiting to see what results will be attributed in the 2014 verified results.

The Heating and Cooling incentives program continued to be one of the strongest performer in the residential suite of programs. This program was mainly driven by contractors participating in the program but they may not always deliver results in the required manner (e.g. allowing customers to apply for their own incentives and tardy reporting).

The Residential Program Portfolio was predominately a carryover of initiatives from previous programs. Three new initiatives were never launched and subsequently removed from the schedule in 2013 with no new additions. Delays in communication with regards to initiative offerings and results reporting hampered LDCs' abilities to engage customers and promote participation. Province-wide advertising provided value in all residential programs except for *peaksaver* **PLUS®** due to technological inconsistency across LDCs.

Work to revitalize and increase the effectiveness and breadth of the initiatives through the residential program needed to be a high priority. There were opportunities within the residential marketplace that needed to be addressed, program developed and offered to customers. The Version 5 schedules changes under the Master Agreement implemented in Q1/Q2 2014 increased the number of LDC-coded coupons available and made new installations of central heating and cooling systems eligible for the Heating and Cooling Incentive.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress: Hydro One Brampton actively promoted this initiative to customers through various marketing channels including the following: bill inserts, newspaper advertisements, website promotion, community events, and retail events.

Additional Comments:

- Due to the rapid growth experienced over the last 15 years of the program, the revised eligibility requirements to a minimum of 20 years old and the age of the housing stock, this initiative experienced a decline in uptake and reached market saturation. This initiative therefore has been under consideration for removal from the portfolio.
- IESO's results were very responsive to province-wide advertising, IESO provincial marketing should continue to play a key role.
- Better relationships with retailers may play a role in increasing participation in this initiative. Retailers can provide opportunities to capture replacement appliances and have them decommissioned after a sale has been committed.
- In an effort to capture additional savings in the perceived last year of the initiative, the eligibility requirement for refrigerators was revised from 20 years old to 15 years old in Q2 2014, prior to the conclusion of this program by December 31, 2014.
- Due to the announcement by the IESO that the Appliance Retirement program was going to cease at the end of 2014, many LDCs lowered (or removed) their marketing support for the program.
- The end of 2014 saw several events that caused disruption in the Appliance Retirement program. ARCA Canada Inc., the provincial administrator and pick-up agent of appliances, had lowered internal staffing requirements.

3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress: Hydro One Brampton worked with local retailers to encourage the exchange of air conditioners and dehumidifiers in stores. In-store advertising increased slightly in 2014.

Additional Comments:

- The design of the initiatives, including eligible measures and incentives amounts are developed through the Residential Working Group. Retail partner(s) were contracted by the IESO to deliver the initiatives province-wide. Individual LDCs had the opportunity to stage in-store events to drive the distribution of LDC coded coupons and promotion of other programs in the portfolio
- This initiative, eligible measures and incentive amounts were influenced by the retail partner with very limited involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores could have diminished the savings potential for this initiative.
- To date, there has only been one retailer participant in the Appliance Exchange Initiative.
- Evaluation, Measurement, and Verification ("EM&V") results indicated that the value of savings for retired room air conditioners ("AC") dropped, resulting in the retail participant not accepting window ACs during the Spring 2013 event.

- Notification to LDCs regarding retailer participation and eligible measures continued to be delayed. Improved communications would have aided in appropriate resource allocation and marketing of the initiative.

- This initiative may have benefited from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of the IESO's contractor for appliance removal.

- The initiative appears to require more promotion from retailers and LDCs.

3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress: Hydro One Brampton actively promoted this initiative to customers through various marketing channels including the following: bill inserts, newspaper advertisements, website promotion, community events, and retail events.

Additional Comments:

- Incentive levels appeared to be insufficient to prompt participants to upgrade HVAC equipment prior to end of useful life. An Air Miles incentive was introduced in 2013 to try and encourage early replacement.

- This initiative was contractor-driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should have been undertaken to drive a higher proportion of furnace and central air conditioner sales to eligible units.

- There were cases where non-participating contractors were offering their own incentives (by discounting their installations to match the value of the IESO incentive) to make the sale. As this occured outside of the initiative, savings were not credited to LDCs. IESO should consider this in future program impact evaluation studies.

- Changes to the schedules in 2014 to allow for incentives for new installations, rather than strictly replacement units, proved to be effective in providing greater results, increasing provincial participation by 20% over 2013.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress: Hydro One Brampton actively promoted this initiative to customers through various marketing channels including the following: bill inserts newspaper advertisements, website promotion, community events, and retail events.

Additional Comments:

- The timeframe for retailer submission of redeemed coupons varied from retailer to retailer, and in some cases were lengthy. The delays and incomplete results reporting limited the ability to react and respond to initiative performance or changes in consumer behaviour.

- The product list could have been distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.

- Program evolution, including new products and review of incentive pricing for the coupon initiatives, should have been a regular activity to ensure continued consumer interest.

- All coupons were provided with LDC custom coding in 2014, which allowed LDCs to promote coupons based on local preferences. However, LDCs were not provided with customer coded coupon results until early 2015 and thus, had no indication of their redemption rates.

- Consumer experience varied amongst retailers offering coupon discounts which can limit redemptions. For example, a particular high volume 'participating retailer' does not accept coupons and have their own procedure. In addition, some retailers had static lists of eligible products and would not discount eligible products unless the product on the list. Some retailers also did not accept coupons for products that had changed their packaging to not include the ENERGY STAR® logo, though they were accepted under the previous packaging.

- The saveONenergy programs would have benefited from specific end cap displays, aisle product stands and product-specific areas. Having products throughout a retail environment weakened the impact.

3.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)

Initiative Activities/Progress: Hydro One Brampton partnered with participating retailers to jointly promote the initiative and found that having a physical presence in stores was beneficial and provided the opportunity to up-sell and promote greater conservation savings. Hydro One Brampton targeted retailers that have enough inventories to support the in store coupon initiative.

Additional Comments:

- This initiative was strongly influenced by the retail participants and had no direct involvement from the LDCs.

- LDCs had the opportunity to stage in-store events to drive the distribution of LDC-coded coupons and promotion of other programs in the portfolio; however, this required cooperation from the local retailer and LDC staff resources.

- The product list had minimal changes over the past four years.

- Limited engagement of local retailers could have restricted the savings potential for this initiative.

- Program evolution, including new products and review of incentive pricing for the coupon initiatives, should have been a regular activity to ensure continued consumer interest.

- The product list could have been distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.

- A review conducted by the EDA Residential Working Group in 2011 identified three areas of need for initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection; and 3) improved training for retailers as retail staffs tend not to be knowledgeable regarding the products or promotion.

- This initiative may have benefited from a more exclusive relationship with a retailer appropriate to the program. There should have been a value proposition for both the retailer and LDC.

- Independently, the Retailer Co-op and Bi-Annual Retailer Event Initiative may not have presented a value for the investment of LDC resources to support these events and should have been backed by a strong residential portfolio.

3.2.1.6 Retailer Co-op

Initiative Activities/Progress: There were no retailer co-op initiatives offered in 2014.

Additional Comments:

- This was a retailer initiative with no direct benefit to LDCs
- Limited engagement of local retailers could have restricted the savings potential for this initiative.
- The availability of retailer and/or LDC staff with product knowledge and the ability to conduct demonstration in store during the events would have been an asset. This could have been a valuable role for LDCs, however many LDCs were limited by available resources and unable to participate.

3.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress: Hydro One Brampton started promoting this program through its delivery agent since 2012. The results were finally realized in 2014, with significant uptake and expected continued results until the end of 2015.

Additional Comments:

- This initiative provided incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs needed to provide education to consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- In 2012 the application process was streamlined, however continued to be too cumbersome for builders. This, combined with limited return, resulted in this initiative continuing to under-achieve.
- Administrative requirements, particularly with individual home modeling, needed to align with perceived stakeholder payback.
- The addition of LED light fixtures, application process improvement, and moving the incentive from the builder to the home-owner may have increased participation.
- This initiative may have benefited from collaboration with the natural gas utilities.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress: Hydro One Brampton has and continues to actively promote this initiative to customers through various marketing channels including the following: bill inserts, newspaper advertisements, website promotion, community events and retail events.

Additional Comments:

- Energy and demand savings have not been reported for the IHD portion of the program as 2013 EM&V results have determined zero savings associated with the IHD. IESO conducted another study in 2014, expanding its study territory beyond those included in the 2013 study to provincial rather than regional results. Results from the second study have not yet been announced.

- The variable funding associated with installing a load controllable thermostat was not sufficient unless it was combined with an IHD. This might not have been possible at all times or when IHD is optional.

- Smart meters installed by most LDCs did not have the capability to communicate directly to an IHD and any mass replacement of newly installed meters with communicating abilities was not fiscally responsible. When proposing technical initiatives that rely on existing LDC infrastructure or technology, there should be an extensive consultative process in order to prevent this type of problem in the future.

- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the smart meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.

- Given the different LDCs' smart meter environments and needs, each LDC positioned the initiative with subtle differences. As such, greater program flexibility was required to address unique LDC needs

- The communication protocols being employed by the IHD and meter manufacturers did not mesh to the reliability level required. The specifications of the communication protocols was not consistent, resulting in numerous delays in program delivery.

3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

Description: Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs to help fund energy audits, replace energy-wasting equipment or pursue new construction that exceeds existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

Targeted Customer Type(s): Commercial, institutional, agricultural, multi-family buildings, industrial.

Objective: Designed to assist building owners and operators as well as tenants and occupants in achieving demand and energy savings, and to facilitate a culture of conservation among these communities as well as the supply chains which serve them.

Discussion:

Throughout 2014 the Commercial and Institutional ("C&I") Working Group continued its efforts to enhance the existing C&I programs and rectify identified program and system deficiencies. This proved to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management restricted growth without providing the anticipated improved measurement and verification results. In addition, Evaluation, Measurement and Verification (EM&V) had not yet achieved transparency. LDCs were held accountable for these results yet are mostly completely removed from the process.

LDC program management was hampered by varying rule interpretation, limited marketing ability, a somewhat inflexible online system of checks and balances and revolving IESO support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the IESO, managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as a mean to accelerate certain program changes. The benefits of expedited change management process were seen in 2013 and carried over into 2014.

Looking ahead, there is an opportunity to make valuable changes to the current program suite for the Conservation First Framework, but LDCs and the IESO should look beyond the current initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, which will meet the needs of the industry and consumers.

The commercial portfolio of programs benefited from considerable momentum and success that had been developed in previous years. Hydro One Brampton continued to actively promote this portfolio to its customers through hosting workshops, attending tradeshows, and customer engagement. Hydro One Brampton hosted its 9th annual Commercial and Industrial Breakfast, an event held every year to promote the energy conservation programs available to its customers and recognize customers that have reduced their energy consumption in the previous year. In addition, there were seven workshops held to educate customers on various energy topics and discuss conservation programs relevant to them.

3.2.2.1 Efficiency: Equipment Replacement Incentive ("ERII") (Schedule C-2)

Initiative Activities/Progress: With ERII being the largest contributor of energy and demand savings, Hydro One Brampton had—and continues to—put emphasis in promoting this initiative to its customers. This was achieved through hosting workshops, attending tradeshows, bill inserts, and newspaper advertisements, as well Hydro One Brampton's own audit program to identify savings potential. Hydro One Brampton established relationships with many of its customers and will continue to expand the customer base. Hydro One Brampton cross-promoted initiatives wherever possible to create increased awareness and cost efficiencies. In 2013, Hydro One Brampton worked with multiple utilities and organizations to promote and increase the uptake of this program. The number of applications being received continues to grow.

Additional Comments:

- A large proportion of LDC savings were attributed to ERII.
- Capability-building programs from industrial programs had very positive contributions to ERII program.
- A number of customer-facing issues in iCon (the IESO's centralized application system) were resolved; however, key LDC administrative back office processing issues continued to be a challenge. For example, currently LDCs are unable to record back office information to complete review and approval process using iCon.
- Applicants and applicant representatives continued to express dissatisfaction and difficulty with the online application system. This issue was addressed by LDCs through application training workshops, Key Account Managers ("KAMs"), channel partner/contractor training and LDC staff acting as customer application representatives. Although this was an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, applicant representatives continue to influence the majority of applications submitted. Continued development of channel partners is essential to program success.
- Lighting was still the most popular measure. Other market sectors were not as engaged yet, specifically the mechanical sector. There continued to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners

- Prescriptive and engineered worksheets provided a much-needed simplified application process for customers. However, the eligible measures needed to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.

- A focus on demand incentives limited some energy project opportunities. In particular, night lighting projects had significant savings potential for customers but tended to have incentives of 10% or less of project cost.

- The requirement to have a customer invoice the LDC for their incentive was very burdensome for the customer and resulted in a negative customer experience and another barrier to participation.

- There was redundancy in the application process as customers may have needed to complete a worksheet and then enter most of that information over to the online application form. This could have been cumbersome.

- Processing head office application became much easier for the lead LDC after schedule changes came into effect in August 2013. The changes implemented allowed the lead LDC to review and approve all facilities in a head office application on behalf of all satellite LDCs under certain circumstances.

- The application process for head office projects remained a significant barrier. Applicants needed to manually enter one application per facility associated with the project which could have been extremely onerous, often requiring a dedicated resource.

- Streamlining of the settlements systems resulted in significant improvement in the payment process in 2013.

- LDCs struggled to repair customer and channel partner relationships and gain momentum in the market place once again.

- IESO implemented a cut-off date of July 31, 2014 for approval of the 2014 social housing adder (SHA) under the ERII program. IESO had instructed that any SHA applications that would be submitted to IESO after July 31, 2014 would not be honored for SHA; however, they failed to mention that it was the timeline to submit the funding request to the IESO by the LDCs and not the submission date of the applications to IESO's ICON system by the Applicant (Customer). As a result, there were some confusions and some of the applications that were submitted to IESO's iCON by July 31, 2014, but had LDCs submitting the funding request to IESO at a later date (once LDCs had completed the review of the applications), were not honored for SHA. Additionally, the formal letter confirming that the SHA annual allocation has been exceeded was received by conservation officers on July 15, 2014, leaving them only 15 days to inform the customers, and this created a negative customer experience.

- The handling of the exterior lighting incentives was a negative customer experience. In the fall of 2014, a new section was introduced in the Prescriptive Lighting worksheet. It offered generous incentives for some exterior lighting projects and many municipal customers took advantage of the available incentives. Within 2 weeks of introducing the incentives, several incentives were suddenly removed for approximately 6 weeks until new incentives were created due to $/kWh incentive being too high for some of the measures. This caused a negative customer experience in several ways:

    - Some customers were planning on applying for rebates exterior prescriptive lighting measures based on the incentives offered but were suddenly not allowed to apply for prescriptive rebates.

- The length of time from pulling out the exterior prescriptive lighting incentives to offering new incentives was too long. There should have been a temporary incentive level offered to allow LDCs to take in new applications.
- The incentives should have been introduced at an appropriate level the first time. While market conditions can change, the incentives offered should have been researched and approved with the expectation that they would be in place for at least 6-12 months.

- Several new prescriptive measure worksheets, including Plug Loads and Refrigeration, were introduced in September 2014 and allowed for new opportunities, albeit late in the framework.
- The Ministerial Directive provided continuity of the conservation programs for the participant, with clear direction on LDC administrative funding for 2015, which helped to avoid a gap in program delivery.

3.2.2.2 Direct Install Initiative ("DIL") (Schedule C-3)

Initiative Activities/Progress: Hydro One Brampton recognized that this program reached a high level of market saturation when it was delivered as Power Savings Blitz. As a result, the Small Business Lighting program was launched after the incentive was increased to $ 1,500 from $ 1,000. Hydro One Brampton promoted this program with a door to door campaign through its delivery agents. In addition, Hydro One Brampton was promoting this program through advertisements, bill inserts and at events. While substantial savings were realized in 2013, they began to decline in 2014.

Additional Comments:

- LED lighting was introduced in 2013 as a new measure and was well-received by customers who may not have previously qualified for DIL eligible upgrades. This is an efficient product with a long estimate useful life.
- Cold-start high output lighting was removed from the program. This particularly affected the farming customers who then had limited options within the program.
- Successful execution of the previous version of this initiative resulted in reduced potential for the 2011-2014 initiative in some LDC's territories.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations. However, LDCs were unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings.
- Many customers were not taking advantage of any additional measures, which may present an opportunity to for future savings with a new program offering.

3.2.2.3 Existing Building Commissioning Incentive Initiative (Schedule C-6)

Initiative Activities/Progress: Hydro One Brampton continued to actively promote this initiative to its customers through hosting workshops, attending tradeshows, and customer engagement.

Additional Comments:

- Initiative name does not properly describe the initiative.
- There was minimal participation for this initiative. It is suspected that the lack of participation in the program was a result of the initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.
- Participation was mainly channel partner driven, however the particulars of the initiative presented too much of a significant barrier for many channel partners to participate.
- The customer expectation was that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning, and chilled water systems used for other purposes should have been made eligible and considered through change management.
- This initiative should have been reviewed for incentive alignment with ERII, as a participant would not receive an incentive if the overall payback was less than 2 years.

3.2.2.4 New Construction and Major Renovation Initiative ("HPNC") (Schedule C-4)

Initiative Activities/Progress: Hydro One Brampton continued to actively promote this program to its customers through hosting workshops, attending tradeshows and customer engagement. Enbridge Gas also promoted this program by engaging customers that have construction projects under consideration.

Additional Comments

- With the Ministerial Directive issued December 21, 2012, facilities with a completion date near the end of 2014 had some confidence that they would be compensated for choosing efficiency measures.
- Participants had until the end of 2014 to submit their applications for the projects that will be completed in 2015. However savings achieved will be accounted for in the new framework (2015 - 2020).
- The custom application process required considerable customer support and skilled LDC staff. The effort required to participate through the custom stream exceeded the value of the incentive for many customers.
- There were no custom measure options for items that did not qualify under the prescriptive or engineered track as the custom path did not allow for individual measures, only whole building modelling.
- The requirement to have a customer invoice the LDC for their incentive was very burdensome for the customer and resulted in a negative customer experience and was a potential barrier to participation.

3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress: Hydro One Brampton continued its partnership with Sheridan College to promote this initiative. This was seen as a way of promoting energy audits to business customers and training the energy experts of the

future. A team of Sheridan students and faculty, including certified energy professionals, performed a full energy assessment of a client's facility and produced a detailed report outlining areas of opportunity for the client to reduce their energy usage. In 2013, there were a few projects completed and several in progress to be completed in 2014. 2014 saw a slight increase in projects and savings.

- The introduction of the new audit component for one system (i.e. compressed air), increased customer participation.
- The energy audit Initiative was considered an 'enabling' initiative and 'fed into' other saveONenergy initiatives.
- LDCs were receiving some savings towards their targets from an audit, which was mainly attributable to operational savings.
- Audit reports from consultants varied considerably and in some cases, while they adhered to the initiative requirements, did not provide value for the participant. A standard template with specific energy-saving calculation requirements should have beeb considered.
- Customers looked to the LDCs to recommend audit companies. A centralized prequalified list provided by the IESO may have been beneficial.
- Participants was limited to one energy audit, which restricted enabling and direction to the other initiatives. This was revised in 2014 and LDCs were then able to consider additional customer participation when presented with a new scope of work.
- Consideration should have be given to allowing a building owner to undertake an audit limited to their lighting system. This way, they may have received valuable information from a neutral third party regarding the appropriate lighting solution for their facility instead of what a local supplier liked to sell.
- The requirement to have a customer invoice the LDC for their incentive was very burdensome for the customer and resulted in a negative customer experience and was a potential barrier to participation
- Hydro One Brampton also offered a high level assessment as a precursor to customers undertaking a full audit or retrofit opportunity in order to aide in driving these programs.

3.2.3 INDUSTRIAL PROGRAM

Description: Owners of large facilities discovered the benefits of energy efficiency through the Industrial Programs, which were designed to help identify and promote energy saving opportunities. It included financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provided a substantial boost to energy productivity. This allowed facilities to take control of their energy so they could create long-term competitive energy advantages which reached across the organization.

Targeted Customer Type(s): Industrial, Commercial, Institutional, Agricultural

Objective:

- Offer distribution customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;
- Implement system optimization projects in systems which are intrinsically complex and capital intensive; and

- Increase the capability of distribution customers to implement energy management and system optimization projects.

Discussion:

The Industrial Program Portfolio was able to provide valuable resources to large facilities such as energy managers and enabling engineering studies. The engineering studies in particular provided a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy managers provided customers with a skilled individual whose only role was to assist them with conservation initiatives. To date, these energy managers have played a key role in customer participation. The KAM and the industrial project supervisors have also been instrumental in managing the embedded energy managers ("EEM") during the first and second half of the year respectively, and promoted activity to the Class A customers.

Due to the size, scope and long lead time of these initiatives and associated projects, the December 2012 Ministerial Directive provided some security for the continuation of the conservation programs and associated compensation for the participant; however the subsequent savings were not be attributed to an LDC's current target for projects that went into service after 2014.

Extensive legal documents, complex program structure and lengthy change management restricted the change and growth of this portfolio. While the expedited change management benefited the commercial portfolio, the industrial portfolio did not see the same results due to the narrow scope of the process. For 2013, the change to the threshold for small capital projects and the new small capital project agreement improved the number of projects and savings achieved within Process and Systems Upgrades Initiation ("PSUI"). Likewise, a decision to proceed with applications for natural gas load displacement generation projects also increased uptake, although the limited time to bring new projects into service was a barrier.

3.2.3.1 Process and Systems Upgrades Initiative ("PSUI") (Schedule D-1)

Initiative Activities/Progress: Hydro One Brampton continued to actively promote this initiative to its customers through hosting workshops, attending tradeshows and customer engagement.

Additional Comments:

- Numerous energy studies were submitted and completed. This is a strong indication that there is potential for large projects with corresponding energy savings. Most of these studies were initiated through Energy Manager and Key Account Manager ("KAM") resources.
- This initiative was limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and a long project development cycle. As such, limited results were expected to be generated in 2014. The majority of the results were expected in 2015 with a much-reduced benefit to cumulative energy savings targets.
- Delays with processing funding payments caused delayed payments to participants beyond contract requirements. In some cases, LDCs developed a separate side agreement between the LDC and participant acknowledging that the participant could not be paid until the funds are received.

- Given the size of the projects involved, the contract required for PSUI was a lengthy and complicated document. A key to making PSUI successful was the new agreement for 'small' projects with simplified and less onerous conditions for the customer.

- To partially address this, changes were made to the ERII program, which allowed smaller projects to be directed to the commercial stream. Most industrial projects to date were submitted as ERII projects due to less onerous contract and M&V requirements. Therefore, PSUI engineering studies and LDC's industrial resources (e.g., Energy managers, KAMs) contributed significant savings to other programs such as ERII.

- A business case was submitted by the Industrial Working Group in July 2012 which changed the limit for a small project from 700 MWh to 1 million dollars in incentives. This allowed more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. This small capital project agreement was finalized through change management in September 2013.

- With the considerable customer interest in on-site load displacement (co-generation) projects, the initiative should have been reviewed to ensure that these projects may have been accepted as part of the PSUI Initiative. The IESO was reviewing waste heat projects only and all other co-generation projects were on hold prior to June 2013, when a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It was expected that a number of projects may have proceeded, although results may not be counted towards LDC 2011-2014 framework target unless applications were submitted before the end of 2014 and the projects are in service before December 31, 2015.

- The requirement for customer invoice to the LDC and provide proof of payment to consultants for their incentive was very burdensome for the customer and resulted in a negative customer experience and was another barrier to participation.

3.2.3.2 Monitoring and Targeting ("M&T") Initiative (Schedule D-2)

Initiative Activities/Progress: Hydro One Brampton continued to actively promote this initiative to its customers through hosting workshops, attending tradeshows and customer engagement.

Additional Comments:

- The M&T initiative was targeted at larger customers with the capacity to review the M&T data. This review required the customer facility to employ an energy manager, or a person with equivalent qualifications, which was a barrier for some customers. As such, only five applications were completed in 2014, province-wide.

- The savings target required for this initiative could have presented a significant challenge for smaller customers.

- Through the change management process in 2013, changes were made to ERII to allow smaller facilities to employ M&T systems.

3.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress: Hydro One Brampton continued to actively promote this initiative to its customers through hosting workshops, attending tradeshows and customer engagement.

Additional Comments:

- The Embedded Energy Managers ("EEMs") proved to be a popular and useful resource for larger customers. There are approximately 50 EEMs and 22 Roving Energy Managers ("REMs") being utilized by customers across the province.
- LDCs that were too small to qualify for their own REM were teaming up with other utilities to hire a REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and customers reported difficulties in hiring capable REMs and EEMs, in some instances taking up to several months to have a resource in place.
- There were a number of studies identified by energy managers and they were able to build capacity and deliver energy savings projects within their respective large commercial/industrial facilities.
- The requirement that 30% of targets must come from non-incented projects was identified as an issue for most EEMs/REMs. The EDA Industrial Working Group proposed removing this requirement for REMs only, as they are not resident full-time at a customer facility to find the non-incented savings.

3.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress: Key Accounts Managers worked with large users to identify new projects to generate additional savings. Hydro One Brampton continued to promote the services available to large users. KAMs have completed energy assessments at multiple facilities and will continue to drive savings for its customers.

Additional Comments

- Customers appreciated dealing with a single contact to interface with an LDC, a resource that had both the technical and business background who could communicate easily with the customer and the LDC.
- Finding this type of skill set was difficult. In addition, the short-term contract and associated energy targets discouraged some skilled applicants, resulting in longer lead times to acquire the right resource.
- This resource was found by some LDCs to be of limited value due to the part-time nature of the position and limited funding. In addition, the position role was too narrow in scope to provide assistance to the wider variety of projects with which LDCs may have been struggling.

3.2.3.5 Demand Response 3 ("DR3") (D-6)

Initiative Activities/Progress: Hydro One Brampton worked with all three Demand Response Providers to deliver this program. As Hydro One Brampton continued to promote Demand Response 3 to its customers through workshops, tradeshows and meetings, there was a continued increase in participation in 2014.

Additional Comments:

- Until early 2013, customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and confirm savings.
- The Industrial Working Group had a discussion with the IESO and representatives of the Ministry on proposed changes for the DR3 program. No program improvements were made in 2013. However, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, aggregators were able to enter into contracts beyond 2014. This allowed them to offer a more competitive contract price (five years) than the previously limited one- to two-year contracts. However on March 31, 2014, the Minister of Energy issued a directive entitled "Continuance of the IESO's Demand Response Program under IESO management" which restricted the IESO from granting any more contract schedules to aggregators, as the program was being transitioned from the IESO to the IESO. This decision prevented the DR3 program from continuing to grow until the IESO was ready to assign DR3 capacity through a new auction process.
- Metering and settlement requirements were complicated and could have reduced customer compensation amounts, and presented a barrier to some customers.
- Compensation amounts were reduced from the previous version of this program and subsequently there was a corresponding decrease in renewal rates.

3.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)

Initiative Activities/Progress: Hydro One Brampton contracted GreenSaver to deliver the Home Assistance Program to targeted residential customers at the end of 2012. GreenSaver used channel engagement to increase the number of participants for this program; a marketing plan was put into place that incorporated direct mail, community networking, event participation and stakeholder events. Savings were realized in 2014.

Additional Comments:

- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and showed benefits since 2013.
- The financial scope, complexity, and customer privacy requirements of this initiative were challenging for LDCs and most contracted this program out. This initiative may have benefited from an IESO-contracted centralized delivery agent.

3.2.5 PRE-2011 PROGRAMS

Savings were realized towards LDC's 2011-2014 target through pre-2011 programs. The targeted customer types, objectives, descriptions, and activities of these programs are detailed in Appendix B

4 2014 LDC CDM Results

4.1 Participation and Savings

Table 4: Participation and Savings by Year

Table 1: Hydro One Brampton Networks Inc. Initiative and Program Level Net Savings by Year

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	879	583	354	289	49	33	23	19	355,028	230,362	150,148	125,609	123	2,535,884
Appliance Exchange	Appliances	46	32	77	80	4	5	16	17	5,189	8,106	28,447	29,555	38	128,734
HVAC Incentives	Equipment	3,253	3,401	4,131	4,978	1,131	710	806	912	2,057,629	1,202,085	1,367,674	1,657,748	3,558	16,229,867
Conservation Instant Coupon Booklet	Items	18,022	871	9,805	29,462	38	6	15	60	644,009	39,402	217,201	802,995	119	3,931,638
Bi-Annual Retailer Event	Items	26,832	29,896	26,624	135,963	47	42	33	227	828,145	754,713	484,132	3,463,427	349	10,008,411
Retailer Co-op	Items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	0	902	910	2,430	0	467	516	1,256	0	3,387	495	0	1,256	3,882
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	76	0	0	0	10	0	0	0	66,703	10	66,703
Consumer Program Total						**1,270**	**1,262**	**1,409**	**2,499**	**3,890,000**	**2,238,056**	**2,248,096**	**6,146,036**	**5,453**	**32,905,119**
Business Program															
Retrofit	Projects	72	207	374	294	473	2,097	2,351	2,336	2,302,032	12,489,528	15,912,521	18,550,920	7,254	97,040,370
Direct Install Lighting	Projects	0	0	912	689	0	0	694	482	0	0	2,383,867	1,836,502	1,176	6,604,236
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	0	0	3	7	0	0	52	144	0	0	92,807	481,103	196	666,717
Energy Audit	Audits	9	4	4	10	0	16	35	134	0	75,529	193,803	652,736	184	1,266,928
Small Commercial Demand Response	Devices	0	0	0	18	0	0	0	10	0	0	0	0	10	0
Small Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	1	1	1	2	58	58	59	399	2,251	840	783	0	399	3,874
Business Program Total						**530**	**2,170**	**3,192**	**3,505**	**2,304,282**	**12,565,897**	**18,583,781**	**21,521,260**	**9,220**	**105,582,125**
Industrial Program															
Process & System Upgrades	Projects	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	0	1	2	0	0	0	41	0	0	0	142,417	41	142,417
Retrofit	Projects	18	0	0	0	190	0	0	0	1,185,812	0	0	0	190	4,743,247
Demand Response 3	Facilities	4	9	14	18	2,276	2,787	3,758	5,241	133,616	67,157	103,236	0	5,241	304,009
Industrial Program Total						**2,467**	**2,787**	**3,758**	**5,282**	**1,319,428**	**67,157**	**103,236**	**142,417**	**5,472**	**5,189,672**
Home Assistance Program															
Home Assistance Program	Homes	0	1	0	366	0	0	0	23	0	0	0	266,840	23	266,840
Home Assistance Program Total						**0**	**0**	**0**	**23**	**0**	**0**	**0**	**266,840**	**23**	**266,840**
Aboriginal Program															
Home Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	64	0	0	0	890	0	0	0	5,001,908	0	0	0	890	20,007,633
High Performance New Construction	Projects	6	3	0	0	111	82	0	0	571,295	363,461	0	0	194	3,375,564
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDC Custom Programs	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total						**1,001**	**82**	**0**	**0**	**5,573,204**	**363,461**	**0**	**0**	**1,084**	**23,383,197**
Other															
Program Enabled Savings	Projects	0	0	0	6	0	0	0	361	0	0	0	2,330,503	361	2,330,503
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	1,879	0	0	0	0	1,879	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Total						**0**	**0**	**0**	**2,240**	**0**	**0**	**0**	**2,330,503**	**2,240**	**2,330,503**
Adjustments to 2011 Verified Results							**176**	**1**	**1**		**836,140**	**900**	**6,110**	**177**	**3,372,604**
Adjustments to 2012 Verified Results								**231**	**105**			**1,327,748**	**264,028**	**336**	**4,775,389**
Adjustments to 2013 Verified Results									**3,919**				**30,771,231**	**3,919**	**61,549,292**
Energy Efficiency Total						**2,934**	**2,990**	**4,026**	**6,643**	**12,951,047**	**15,163,186**	**20,830,599**	**30,407,056**	**16,586**	**169,345,691**
Demand Response Total (Scenario 1)						**2,334**	**3,311**	**4,332**	**6,906**	**135,867**	**71,385**	**104,514**	**0**	**6,906**	**311,765**
Adjustments to Previous Years' Verified Results Total						**0**	**176**	**231**	**4,026**	**0**	**836,140**	**1,328,648**	**31,041,369**	**4,432**	**69,697,284**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**5,268**	**6,477**	**8,590**	**17,575**	**13,086,913**	**16,070,711**	**22,263,761**	**61,448,425**	**27,924**	**239,354,740**
													Full OEB Target:	**45,610**	**189,540,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**61.2%**	**126.3%**

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

*Includes adjustments after Final Reports were issued

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Table 5: Summarized Program Results

#	Initiative	Activity Unit	Uptake/ Participation Units			
Consumer Programs			**2011**	**2012**	**2013**	**2014**
1	Appliance Retirement	Appliances	56,110	34,146	20,952	22,563
2	Appliance Exchange	Appliances	3,688	3,836	5,337	5,685
3	HVAC Incentives	Equipment	92,748	87,540	96,286	113,002
4	Conservation Instant Coupon Booklet		567,678	30,891	347,946	1,208,108
5	Bi-Annual Retailer Event	Coupons	952,149	1,060,901	944,772	4,824,751
6	Retailer Co-op	Items	152	0	0	0
7	Residential Demand Response (switch / Programmable Thermostat)	Devices	19,550	98,388	171,733	241,381
8	Residential Demand Response (IHD)	Devices	0	49,689	133,657	188,577
9	New Construction Program	Houses	27	21	279	2,367
Business Programs						
10	Efficiency: Equipment Replacement – Retrofit	Projects	2,828	6,481	9,746	10,925
11	Direct Installed Lighting	Projects	20,741	18,691	17,833	23,784
12	Existing Building Commissioning Incentive	Buildings	0	0	0	5
13	New Construction and Major Renovation Incentive	Buildings	25	98	158	226
14	Energy Audit	Audits	222	357	589	473
15	Commercial Demand Response (part of the Residential program schedule)	Devices	132	294	1,211	3,652
16	Demand Response 3 (part of the Industrial program schedule)	Facilities	0	0	378	820
Industrial Programs						
17	Process & System Upgrades	Projects	0	0	5	10
18	Monitoring & Targeting	Projects	0	1	3	5
19	Energy Manager	Managers	1	132	306	379
20	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	433	0	0	0
21	Demand Response 3	Facilities	124	185	281	336
Home Assistance Program						
22	Home Assistance Program	Homes	46	5,920	29,654	25,424
Pre-2011 Programs						
23	Electricity Retrofit Incentive Program	Projects	2,028	0	0	0
24	High Performance New Construction	Projects	182	73	19	3
25	Toronto Comprehensive	Projects	577	15	4	5
26	Multifamily Energy Efficiency Rebates	Projects	110	0	0	0
27	Data Centre Incentive Program	Projects	8	0	0	0
28	EnWin Green Suites	Projects	2,028	0	0	0

Table 6: Verified Results

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Programs											
1	Appliance Retirement	100%	100%	224	1,540,112	42%	44%	124	861,146	123	2,535,884
2	Appliance Exchange	100%	100%	75	128,375	53%	53%	42	71,297	38	128,734
3	HVAC Incentives	100%	100%	6,856	12,224,308	48%	48%	3,558	6,285,136	3,558	16,229,867
4	Conservation Instant Coupon Booklet	100%	100%	89	1,280,286	111%	113%	119	1,703,606	119	3,931,638
5	Bi-Annual Retailer Event	100%	100%	251	4,024,618	104%	104%	349	5,530,417	349	10,008,411
6	Retailer Co-op	0%	0%	0	0	0%	0%	0	0	0	0
7	Residential Demand Response*	-	-	0	3,882	-	-	2,238	3,882	1,256	3,882
8	Residential New Construction	-	-	15	0	-	-	10	66,703	10	66,703
Business Programs											
9	Efficiency: Equipment Replacement	91%	105%	9,582	65,192,377	76%	75%	7,257	49,255,001	7,254	97,040,370
10	Direct Install Lighting	69%	84%	1,246	4,471,344	94%	94%	1,176	4,220,369	1,176	6,604,236
11	Existing Building Commissioning Incentive	-	-	0	0	-	-	0	0	0	0
12	New Construction and Major Renovation Incentive	100%	100%	364	1,062,796		0%	196	573,910	196	666,717
13	Energy Audit	-	97%	267	1,341,552	-66%	-66%	184	922,068	184	1,266,928
14	Commercial Demand Response (part of the Residential program schedule)	-	-	10	0	-	-	10	0	10	0

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
15	Demand Response 3* (part of the Industrial program schedule)	-	-	458	3,874	-	-	573	3,874	399	3,874
Industrial Programs											
16	Process & System Upgrades	-	-	0	0	-	-	0	0	0	0
17	Monitoring & Targeting	-	-	0	0	-	-	0	0	0	0
18	Energy Manager	-	-90%	45	158,241	-90%	90%	41	142,417	41	142,417
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	0	1,634,077	-	-	190	1,185,812	190	4,743,247
20	Demand Response 3*	-	-	14,062	304,009	-	-	14,062	304,009	5,241	304,009
Home Assistance Program											
21	Home Assistance Program	12%	90%	23	266,840	100%	100%	23	266,840	23	266,840
22	Electricity Retrofit Incentive Program	-	-	1,621	8,925,378	-	-	890	5,001,908	890	20,007,633
23	High Performance New Construction	100%	100%	387	1,869,756	50%	50%	194	934,756	194	3,375,564
24	Toronto Comprehensive	-	-	0	0	-	-	0	0	0	0
25	Multifamily Energy Efficiency Rebates	-	-	0	0	-	-	0	0	0	0
26	Data Centre Incentive Program	-	-	0	0	-	-	0	0	0	0
	Adjustments to previous year's verified results			5.176	40,098,049			3,919	30,771,231	3,919	61,549,292

Table 7: Summarized 2014 Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	3.42	6.36	2.50	6.15	5.45	32.90
Business Program Total	4.48	28.86	3.51	21.52	9.22	105.58
Industrial Program Total	5.29	0.16	5.28	0.14	5.47	5.19
Home Assistance Program Total	0.023	0.27	0.023	0.27	0.023	0.27
Pre-2011 Programs completed in 2011 Total	0.00	0.00	0.00	0.00	0.00	0.00
Other Adjustments to Previous Year's Verified Results	5.33	40.46	4.03	31.04	4.43	69.70
Total IESO Contracted Province-Wide CDM Programs	**20.77**	**78.44**	**17.58**	**61.45**	**27.92**	**239.35**

4.2 Evaluation, Measurement and Verification ("EM&V") Findings

The following table provides a summary of the 2014 EM&V findings for the evaluated saveONenergy program initiatives. These key evaluation findings are derived from the 2014 evaluations of the saveONenergy programs and issued by the IESO.

Table 8: Evaluation Findings

#	Initiative	IESO Province-Wide Key Evaluation Findings
Consumer Programs		
1	Appliance Retirement	• Participation increased slightly to 22,563 (7.7%) in 2014 compared with 20,952 in 2013. • Since 2011 overall Initiative participation has decreased nearly 60%. • The greatest decrease was seen in the number of refrigerators collected year-over-year • Of appliances collected, refrigerators and freezers remain the most dominate measures accounting for 90%. However, window AC units and dehumidifiers saw a marked increase of 29.6% and 27% respectively in 2014. • Net to gross ratio (NTG) increased slightly to 47% compared to 43% as reported for 2013 and 2012 program years.
2	Appliance Exchange	• Participation in 2014 increased by 6.5% to 5,685 appliances from 5,337 compared to 2013 • Per-unit savings has increased by 36.6% as ENERGY STAR criteria increases and more participants purchase ENERGY STAR replacements appliances. This resulted in a 6.5% increase in Net Energy & Demand savings. • Net to Gross ratio (NTG) remained unchanged from 2013 at 52.6%

#	Initiative	IESO Province-Wide Key Evaluation Findings
3	HVAC Incentives	• In 2014 net savings increased by 20% from 2013 and overall participation increased by 17% to 113,002 compared to 2013 • The ECM measure has remained the dominant source of savings since 2011 • Per unit furnace savings increased 12.7% due to a shift in the number of participants who use their furnace fan continuously both before and after the retrofit. • Per unit energy and demand savings assumptions for central air conditioners decreased by 56% due to reduced run hours • Net to Gross ratio (NTG) remained unchanged from 2013 at 48%
4	Conservation Instant Coupon Booklet	• Customers redeemed more than five times as many annual coupons in 2014 as in 2013. In total, approximately 500, 000 Annual Coupons were redeemed in 2014 with 110,000 being LDC Coded Coupons. • There was a further reduction in savings for lighting measures from changes in the baseline due to the phase out of 72W and 100W incandescent bulbs. • Despite the significant per unit savings reductions for lighting measure, the Net Annual Savings from Annual Coupons in 2014 was more than six times that in 2013. This is primarily because of higher participation and the inclusion of LED coupons and full year availability of all coupons. • Measured NTG ratios grew significantly in 2014. The NTG ratio is 53% higher in 2014 than in 2013 due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative measures and general energy efficient measures without the use of a coupon but influenced by the coupon program.

#	Initiative	IESO Province-Wide Key Evaluation Findings
5	Bi-Annual Retailer Event	• Over 2.5 million coupons were redeemed in 2014 compared with 2013 redemptions • The Bi-Annual Coupon Event saw a substantial increase in the number of coupons redeemed during the Spring and Fall Events in 2014 compared to 2013. The increase can be linked to a substantial increase in LED purchases with event coupons accounting for 84% of all Bi-Annual Coupons redeemed. • Reductions in per unit savings were overshadowed by the increase in coupon redemptions. Overall savings increased by approximately 85% in 2014 compared with 2013 Demand and Energy Savings. • Similar to the Annual Coupon Event measured NTG ratios rose by 53% compared to 2013 NTG ratios. The rise is due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative and general energy efficient measures without the use of a coupon but influenced by the Bi-Annual Coupon event.
7	Residential Demand Response	• There were an additional 55,000 CAC load control devices enrolled in the program in 2014 relative to 2013, which increased the capacity of the residential segment of the program from 129 MW in 2013 to 143 MW in 2014. • Ex-ante impacts on a per device basis were lower than 2013 average. • There were no energy savings in 2014 because there were no system-wide events were called. • Load impact estimates for the average small and medium business and for electric water heaters among residential customers remain consistent with prior year's analysis • IHD's yielded no statistically significant energy savings.
8	Residential New Construction	• The most significant growth in the initiative has been participation in the prescriptive track. MW savings in the prescriptive track increased from zero summer peak MW savings in 2011 to 352 summer peak kW savings in 2014. • The custom track saw participation for the first time in 2014. One custom project of 55 homes contributed 37 kW demand savings and 0.5 GWh of energy savings. • New deemed savings for performance track homes were developed and implemented, resulting more consistent realization rates for 2014. • ENERGY STAR New Homes was introduced as an eligible measure within the performance track in 2014. As a result, these ENERGY STAR New Homes provided 1% of peak kW savings and 4% of kWh savings.

#	Initiative	IESO Province-Wide Key Evaluation Findings
Business Programs		
9	Efficiency: Equipment Replacement	• The number of prescriptive projects increased slightly (1.2%) in 2014 to a total of 4,812. However, total net verified savings and peak demand savings dropped significantly (19% and 30% respectively). This is due to a 19% drop in per-project net verified savings, which can be attributed to lower track level realization rate and net-to-gross ratio and is related to smaller average project sizes. • The quantity of engineered projects increased 22% to a total of 3,906 in 2014, combined with a net verified savings per project increase of 17% the track saw a dramatic 47% increase in net energy savings. • Lower demand realization rates across the program as a whole were tied to equipment differences between reported and calculated values. For lighting projects the difference was most often seen in baseline and retrofit lamp wattages and ballast factors. Non-lighting tracks exhibited lower demand realization rates due to the following factors: o Variations in load profiles where the evaluation team found equipment that operated fewer hours or at a lower capacity than expected from the project documentation. o Inconsistencies in equipment nameplate data (typically efficiency or capacity) between project documentation and equipment installed on-site. o Weather dependent control systems leading to shifts in how often the equipment operated.

#	Initiative	IESO Province-Wide Key Evaluation Findings
10	Direct Install Lighting	• 23,784 projects were completed in 2014 (34% increase from 2013) • The category of 'Other' business type projects increased 71% when compared to 2013. Agribusinesses make up 74% of the 'Other' business type category. While growth in the number of projects is good, agribusinesses projects, in particular, have a realization rate of only 58.5%. This is primarily due to the verified annual operating hours being approximately 45% less than the assumed annual operating hours. • In 2014 LED measures provide the most net savings of any other SBL measure making up 59% of net energy savings in 2014. Their long effective useful life and retention of a larger amount of savings after the baseline adjustment allow LED measures to also contribute substantially more lifetime savings than CFLs and linear fluorescents. • Overall energy and demand realization rates decreased by 1.8 and 3.1 %, respectively, from 2013. • Sampled rural projects have lower energy realization rather than urban projects (63.8% compared to 83.5%) across the 2011 – 2014 sample • Sampled rural projects have even lower demand realization rather than urban projects (49.7% compared to 74.1%) across the 2011 – 2014 sample • The annual proportion of net energy savings from rural projects has increased from 30% in 2011 to 41% in 2014
11	Existing Building Commissioning Incentive	• 5 projects completed the Hand-off stage in 2014. • Energy realization rate was estimated at 116% and demand realization rate at 202%. • About 31 participants are still in the scoping stage or implementation stage.

#	Initiative	IESO Province-Wide Key Evaluation Findings
12	New Construction and Major Renovation Incentive	• Savings have increased every year of the initiative with an increased participation of 50% from 2013 • In 2014, most savings came from the custom track providing 71% of demand savings. • Participation from HVAC measures occurred for the first time in 2014 (providing 14% of summer peak kW savings and 5% of kWh savings). • The measures with the greatest impact on low realization rates for prescriptive measures were high volume low speed (HVLS) fans and variable frequency drives (VFDs). • Province-wide realization rates declined slightly for 2014, as a result of the wider variety of measures being implemented. • Key drivers for participation are: initial project cost, followed by electricity costs and expected energy savings are the key drivers to participation.
Industrial Programs		
16	Process & System Upgrades	• 10 PSUI Capital Incentive projects implemented in 2014, compared to 5 in 2013. o 4 projects are Behind the Meter Generation (BMG) projects. o The remaining projects were energy efficiency improvements in pumping, cooling, compressed air systems and industrial processes. • Each project received its own Net to Gross (NTG) value. NTG ratios ranged from 62% to 100% for the 10 projects • Realization rates remained high in 2014, ranging from 90 to over 100%.
20	Demand Response 3	• The largest 25 contributors account for 60% of the contractual demand reduction – that is, less than 4% of contributors account for the majority of the load reductions. • A multi-year analysis indicates 2012 was the best year for program performance. After 2012, a single large contributor left the program, resulting in a decrease in overall performance in 2013 and 2014. This highlights the risk having a highly concentrated program with a few large contributors representing a large share of the program capacity. • There were no events called in 2014 and the contracted capacity was similar to 2013.

#	Initiative	IESO Province-Wide Key Evaluation Findings
Home Assistance Program		
21	Home Assistance Program	• Participation decreased by 5 % to 25,424 participants compared with 2013 (26,756). The decrease was due to six LDCs not participating in the Home Assistance Program in 2014. • Realization rates for demand doubled in 2014 to 56% compared with 2013 (26%). However, energy realization rates decreased by 10% to 77% compared with 2013 results. • Realization rate for demand savings increased due to the adoption of the new FAST Tool which incorporated updated kW savings for weatherization measures in particular insulation measures.

Note:

The Key Evaluation findings are derived from the 2014 evaluations of the saveONenergy programs. These findings were developed by 3rd party evaluation contractors. Complete findings are detailed in the contractors' full evaluation reports, which will be available publicly in Q4 2015.

4.3 Evaluation

The following is taken directly from the IESO's "2014 Key Evaluation Findings" for all of the evaluated saveONenergy initiatives for 2014.

Consumer Program

Appliance Retirement Initiative

- Participation increased slightly to 22,563 (7.7%) in 2014 compared with 20,952 in 2013.
- Since 2011 overall initiative participation has decreased by nearly 60%.
- The greatest decrease was seen in the number of refrigerators collected year-over-year.
- Of appliances collected, refrigerators and freezers remain the most dominate measures accounting for 90%. However, window AC units and dehumidifiers saw a marked increase of 29.6% and 27% respectively in 2014.
- Net to gross ratio (NTG) increased slightly to 47% compared to 43% as reported for 2013 and 2012 program years.

Appliance Exchange Initiative

- Participation in 2014 increased by 6.5% to 5,685 appliances from 5,337 compared to 2013
- Per-unit savings has increased by 36.6% as ENERGY STAR criteria increases and more participants purchase ENERGY STAR replacements appliances. This resulted in a 6.5% increase in Net Energy & Demand savings.
- Net to Gross ratio (NTG) remained unchanged from 2013 at 52.6%.

Heating and Cooling Initiative

- In 2014 net savings increased by 20% from 2013 and overall participation increased by 17% to 113,002 compared to 2013
- The ECM measure has remained the dominant source of savings since 2011
- Per unit furnace savings increased 12.7% due to a shift in the number of participants who use their furnace fan continuously both before and after the retrofit.
- Per unit energy and demand savings assumptions for central air conditioners decreased by 56% due to reduced run hours
- Net to Gross ratio (NTG) remained unchanged from 2013 at 48%

Annual Coupons

- Customers redeemed more than five times as many annual coupons in 2014 as in 2013. In total, approximately 500,000 Annual Coupons were redeemed in 2014 with 110,000 being LDC coded coupons.
- There was a further reduction in savings for lighting measures from changes in the baseline due to the phase out of 72W and 100W incandescent bulbs.
- Despite the significant per unit savings reductions for lighting measure, the Net Annual Savings from Annual Coupons in 2014 was more than six times that in 2013. This is primarily because of higher participation and the inclusion of LED coupons and full year availability of all coupons.
- Measured NTG ratios grew significantly in 2014. The NTG ratio is 53% higher in 2014 than in 2013 due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative measures and general energy efficient measures without the use of a coupon but influenced by the coupon program.

Bi-annual Coupon Events

- Over 2.5 million coupons were redeemed in 2014 compared with 2013 redemptions.
- The Bi-Annual Coupon Event saw a substantial increase in the number of coupons redeemed during the Spring and Fall Events in 2014 compared to 2013. The increase can be linked to a substantial increase in LED purchases with event coupons accounting for 84% of all Bi-Annual Coupons redeemed.
- Reductions in per unit savings were overshadowed by the increase in coupon redemptions. Overall savings increased by approximately 85% in 2014 compared with 2013 Demand and Energy Savings.
- Similar to the Annual Coupon Event measured NTG ratios rose by 53% compared to 2013 NTG ratios. The rise is due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative and general energy efficient measures without the use of a coupon but influenced by the Bi-Annual Coupon event.

peaksaverPLUS

- There were an additional 55,000 CAC load control devices enrolled in the program in 2014 relative to 2013, which increased the capacity of the residential segment of the program from 129 MW in 2013 to 143 MW in 2014.
- Ex-ante impacts on a per device basis were lower than 2013 average.
- There were no energy savings in 2014 because there were no system-wide events were called.
- Load impact estimates for the average small and medium business and for electric water heaters among residential customers remain consistent with prior year's analysis.
- IHD's yielded no statistically significant energy savings.

Residential New Construction

- The most significant growth in the initiative was due to participation in the prescriptive track. MW savings in the prescriptive track increased from zero summer peak MW savings in 2011 to 352 summer peak kW savings in 2014.
- The custom track saw participation for the first time in 2014. One custom project of 55 homes contributed 37 kW demand savings and 0.5 GWh of energy savings.
- New deemed savings for performance track homes were developed and implemented, resulting in more consistent realization rates for 2014.
- ENERGY STAR New Homes was introduced as an eligible measure within the performance track in 2014. As a result, these ENERGY STAR New Homes provided 1% of peak kW savings and 4% of kWh savings.

Home Assistance Program

- Participation decreased by 5% to 25,424 participants compared with 2013 (26,756). The decrease was due to six LDCs not participating in the Home Assistance Program in 2014.
- Realization rates for demand doubled in 2014 to 56% compared with 2013 (26%). However, energy realization rates decreased by 10% to 77% compared with 2013 results.
- The realization rate for demand savings increased due to the adoption of the new FAST Tool which incorporated updated kW savings for weatherization measures in particular insulation measures.

Business Program

Retrofit

- The number of prescriptive projects increased slightly (1.2%) in 2014 to a total of 4,812. However, total net verified savings and peak demand savings dropped significantly (19% and 30% respectively). This is due to a 19% drop in per-project net verified savings, which can be attributed to a lower track level realization rate and a lower net-to-gross ratio and is related to smaller average project sizes.
- The quantity of engineered projects increased 22% to a total of 3,906 in 2014, combined with a net verified savings per project which increased by 17% and the track saw a dramatic 47% increase in net energy savings.
- Lower demand realization rates across the program as a whole were tied to equipment differences between reported and calculated values. For lighting projects the difference was most often seen in baseline and retrofit lamp wattages and ballast factors. Non-lighting tracks exhibited lower demand realization rates due to the following factors:
    - Variations in load profiles where the evaluation team found equipment that operated fewer hours or at a lower capacity than expected from the project documentation.

- Inconsistencies in equipment nameplate data (typically efficiency or capacity) between project documentation and equipment installed on-site.
- Weather dependent control systems leading to shifts in how often the equipment operated.

Small Business Lighting

- 23,784 projects were completed in 2014 (34% increase from 2013)
- The category of 'Other' business type projects increased by 71% when compared to 2013. Agribusinesses make up 74% of the 'Other' business type category. While growth in the number of projects was good, agribusinesses projects, in particular, have a realization rate of only 58.5%. This is primarily due to the verified annual operating hours being approximately 45% less than the assumed annual operating hours.
- In 2014 LED measures provide the most net savings of any other SBL measure making up 59% of net energy savings in 2014. Their long effective useful life and retention of a larger amount of savings after the baseline adjustment allow LED measures to also contribute substantially more lifetime savings than CFLs and linear fluorescents.
- Overall energy and demand realization rates decreased by 1.8 and 3.1 %, respectively, from 2013.
    - Sampled rural projects have lower energy realization than urban projects (63.8% compared to 83.5%) across the 2011 –2014 sample.
    - Sampled rural projects have even lower demand realization than urban projects (49.7% compared to 74.1%) across the 2011 –2014 sample.
    - The annual proportion of net energy savings from rural projects has increased from 30% in 2011 to 41% in 2014.

Audit Funding

- The number of audits carried out in 2014 decreased by 20% when compared to 2013.
- The average per audit net energy savings attributable to the Audit Funding Initiative was estimated to be 65 MWh and 13 kW of summer peak demands savings.
- Time series analysis quantified additional savings from measures implemented after the initial program year. It was found that an additional 7.2%, 5.0% and 0.1% can be added to all previously reported projects in 2011, 2012 and 2013 projects, respectively.

Existing Building Commissioning

- Projects completed the Hand-off stage in 2014.
- The energy realization rate was estimated at 116% and demand realization rate at 202%.

- About 31 participants were still in the scoping stage or implementation stage.

High Performance New Construction

- Savings increased every year of the initiative with an increased participation of 50% from 2013.
- In 2014, most savings came from the custom track providing 71% of demand savings.
- Participation from HVAC measures occurred for the first time in 2014 (providing 14% of summer peak kW savings and 5% of kWh savings).
- The measures with the greatest impact on low realization rates for prescriptive measures were high volume low speed (HVLS) fans and variable frequency drives (VFDs).
- Province-wide realization rates declined slightly for 2014, as a result of the wider variety of measures being implemented.
- Key drivers for participation are: initial project cost, followed by electricity costs and expected energy savings are the key drivers to participation.

Industrial Program

Process and Systems Upgrade Initiative

- 10 PSUI Capital Incentive projects implemented in 2014, compared to 5 in 2013.
    - 4 projects are Behind the Meter Generation (BMG) projects.
    - The remaining projects were energy efficiency improvements in pumping, cooling, compressed air systems and industrial processes.
- Each project received its own Net to Gross (NTG) value. NTG ratios ranged from 62% to 100% for the 10 projects
- Realization rates remained high in 2014, ranging from 90 to over 100%.

Process and Systems Energy Managers Initiative – Non-incented savings

- 379 Energy Manager projects were completed in 2014 compared to 306 in 2013
- Energy Managers are important drivers of non-incented savings projects.
- In 2014, the Energy Mangers initiative has contributed to 35% of energy savings for Industrial Programs

Process and Systems Monitoring and Targeting Initiative – Non-incented savings

- 5 projects were completed in 2014, compared to 3 in 2013.

- Low realization rates (36% for energy savings and 59% for demand savings) are attributed to reported savings based on total potential savings rather than non-incentivized realized savings, while the verified savings only include non-incentivized savings).

Demand Response - DR-3

- The largest 25 contributors account for 60% of the contractual demand reduction – that is, less than 4% of contributors account for the majority of the load reductions.
- A multi-year analysis indicates 2012 was the best year for program performance. After 2012, a single large contributor left the program, resulting in a decrease in overall performance in 2013 and 2014. This highlights the risk having a highly concentrated program with a few large contributors representing a large share of the program capacity.
- There were no events called in 2014 and the contracted capacity was similar to 2013.

Note:

The Key Evaluation findings are derived from the 2014 evaluations of the saveONenergy programs. These findings were developed by 3rd party evaluation contractors. Complete findings are detailed in the contractors' full evaluation reports, which will be available publicly in Q4 2015.

4.4 Spending

Table 9 and 10 summarize the total spending by initiative that Hydro One Brampton has incurred in 2014 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 9: 2014 Spending

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	$96,956.73				$96,956.73
Appliance Exchange					$0.00
HVAC Incentives	$96,956.73				$96,956.73
Conservation Instant Coupon Booklet					$0.00
Bi-Annual Retailer Event	$96,956.73				$96,956.73
Retailer Co-op					
Residential Demand Response	$727,036.25				$727,036.25
New Construction Program	$208,256.73				$208,256.73
Business Program					
Efficiency: Equipment Replacement	$503,960.18		$2,941,316.02		$3,445,276.20
Direct Installed Lighting	$135,624.39				$135,624.39
Existing Building Commissioning Incentive					
New Construction and Major Renovation Initiative	$299,006.38		$161,394.14		$460,400.52
Energy Audit	$85,897.01		$50,089.38		$135,986.39
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study					
b) detailed engineering study	$30,745.67				$30,745.67
c) program incentive					
Monitoring & Targeting	$30,745.67				$30,745.67
Energy Manager					
Key Account Manager					
Efficiency Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3					
Home Assistance Program					
Home Assistance Program	$92,544.32				$92,544.32
TOTAL SPENDING	$2,501,643.52		$3,152,799.54		$5,654,443.06

Table 10: Cumulative Spending (2011-2014)[1]

Initiative	PAB	PBI	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	$ 280,828.22				$ 280,828.22
Appliance Exchange					
HVAC Incentives	$ 280,428.22				$ 280,428.22
Annual Coupons					
Conservation Coupon Booklet	$ 168,722.20				$ 168,722.20
Bi-Annual Retailer Event	$ 118,569.95				$ 118,569.95
Residential Demand Response	$ 727,036.25				$ 727,036.25
New Construction Program	$ 280,022.20				$ 280,022.20
Home Energy Assessment	$71,765.47				$71,765.47
Business Program					
Equipment Replacement	$1,417,868.91		$6,969,323.191		$8,387,192.10
Direct Installed Lighting	$ 232,226.81				$ 232,226.81
Existing Building Commissioning Incentive					
New Construction and Major Renovation Initiative	$ 299,006.38		$ 188,079.14		$ 487,085.52
Energy Audit	$175,245.14		$ 130,760.38		$ 306,005.52
Small Commercial Demand Response					
Demand Response					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study					
b) detailed engineering study	$ 41,512.81				$ 41,512.81
c) program incentive					
Monitoring & Targeting	$ 41,512.81				$ 41,512.81
Energy Manager					
Key Account Manager (“KAM”)					
Equipment Replacement Incentive					
Demand Response 3					
Home Assistance Program					
Home Assistance Program	$ 190,472.13				$ 190,472.13
Pre 2011 Programs					
Electricity Retrofit Incentive Program			$1,495,101.06		$1,495,101.06
High Performance New Construction					
Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1					
Home Energy Audit Tool					
Total CDM Program Spending	$4,325,217.50		$8,783,263.77		$13,108,481.27

[1]The Spending for Equipment Replacement Participant Incentives (PI) reported in 2013 was overstated by $456,443.06, an internal review has identified the error and the corrected amount is reflected in the 2011-2014 Cumulative Total for PI.

5 Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

The updated forecast prepared for this report shows that there was a shortfall of approximately 17.7 MW versus Hydro One Brampton's 2014 peak demand reduction target of 45.6 MW. Although, the peak demand savings are below target, Hydro One Brampton surpassed the 2014 electricity energy savings target of 189.5 GWh by 49.8 GWh.

Table 11: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by IESO	5.3	2.9	2.9	2.9
2012 – Verified by IESO	0.2	6.5	3.2	3.2
2013 – Verified by IESO	0.0	0.2	8.6	4.3
2014 – Verified by IESO	0.0	0.1	4.0	17.6
Verified Net Annual Peak Demand Savings in 2014:				**27.9**
Hydro One Brampton 2014 Annual CDM Capacity Target:				**45.6**
Verified Portion of Peak Demand Savings Target Achieved (%):				**61.2%**

Table 12: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by IESO	13.1	13.0	13.0	12.9	51.9
2012 – Verified by IESO	0.8	16.1	16.0	16.0	48.9
2013 – Verified by IESO	0.0	1.3	22.3	22.2	45.7
2014 – Verified by IESO	0.0	0.3	31.05	61.4	92.8
Verified Net Cumulative Energy Savings 2011-2014:					**239.4**
Hydro One Brampton 2011-2014 Cumulative CDM Energy Target:					**189.5**
Verified Portion of Cumulative Energy Target Achieved (%):					**126.3%**

6 Conclusion

Over the course of 2014, Hydro One Brampton achieved an incremental 17.6 MW in peak demand savings and 92.8 GWh in energy savings, which represents 39% and 49% of Hydro One Brampton's 2014 target, respectively.

The overall results achieved in 2011-2014 are 27.9 MW in peak demand savings and 239.4 GWh in energy savings, which represents 61.2% and 126.3% of Hydro One Brampton's 2014 target, respectively. These results are representative of a considerable effort expended by Hydro One Brampton, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in future CDM programs.

Future reports on Conservation First will be provided by LDCs to the IESO who will report annually to the OEB.

Appendix A: Initiative Descriptions

Residential Program

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objectives: Achieve energy and demand savings by permanently decommissioning certain older, inefficient refrigeration appliances.

Description: This is an energy efficiency Initiative that offers individuals and businesses free pick-up and decommissioning of old large refrigerators and freezers. Window air conditioners and portable dehumidifiers will also be picked up if a refrigerator or a freezer is being collected.

Targeted End Uses: Large refrigerators, large freezers, window air conditioners and portable dehumidifiers.

Delivery: IESO centrally contracts for the province-wide marketing, call centre, appliance pick-up and decommissioning process. LDC's provides local marketing and coordination with municipal pick-up where available.

Additional detail is available:

- Schedule B-1, Exhibit D. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx.

In Market Date: February, 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

Objective: The objective of this initiative is to remove and permanently decommission older, inefficient window air conditioners and portable dehumidifiers that are in Ontario.

Description: This initiative involves appliance exchange events. Exchange events are held at local retail locations and customers are encouraged to bring in their old room air conditioners (AC) and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment. Window ACs were discontinued from the program in 2013.

Targeted End Uses: Window air conditioners and portable dehumidifiers

Delivery: IESO contracts with participating retailers for collection of eligible units. LDCs provide local marketing.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: May 2011

HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to encourage the replacement of existing heating systems with high efficiency furnaces equipped with electronically commutated motors (ECM), and to replace existing central air conditioners with ENERGY STAR qualified systems and products**.**

Description: This is an energy efficiency initiative that provides rebates for the replacement of old heating or cooling systems with high efficiency furnaces (equipped with ECM) and ENERGY STAR® qualified central air conditioners by approved Heating, Refrigeration, and Air Conditioning Institute (HRAI) qualified contractors.

Targeted End Uses: Central air conditioners and furnaces

Delivery: IESO contracts centrally for delivery of the program. LDCs provide local marketing and encourage local contractors to participate in the initiative.

Additional detail is available:

- Schedule B-1, Exhibit B. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: February 2011

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to encourage households to purchase energy efficient products by offering discounts.

Description: This initiative provides customers with year round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy to install energy efficient measures and can be redeemed at

participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at www.saveoneenergy.ca.

Targeted End Uses: ENERGY STAR® qualified Standard Compact Flourescent Lights ("CFLs"),ENERGY STAR® qualified Light Fixtures lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in Timers, Advanced power bars, clothesline, baseboard programmable thermostats.

Delivery: The IESO develops the electronic version of the coupons and posts them online for download. Three LDC specific coupons were made available for local marketing and utilization by LDCs. The IESO enters into agreements with retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: May 2011

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

Objective: The objective of this initiative is to provide instant point of purchase discounts to individuals at participating retailers for a variety of energy efficient products.

Description: Twice a year (Spring and Fall), participating retailers host month-long rebate events. During the months of April and October, customers are encouraged to visit participating retailers where they can find coupons redeemable for instant rebates towards a variety of low cost, easy to install energy efficient measures.

Targeted End Uses: As per the Conservation Instant Coupon Initiative

Delivery: The IESO enters into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also refer retailers to the IESO and market this initiative locally.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 2011

RETAILER CO-OP

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

Objective: Hold promotional events to encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

Description: The Retailer Co-op Initiative provides LDCs with the opportunity to work with retailers in their service area by holding special events at retail locations. These events are typically special promotions that encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

Targeted End Uses: As per the Conservation Instant Coupon Initiative

Delivery: Retailers apply to the IESO for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the IESO. The IESO provides each LDC with a list of retailers who have qualified for Co-Op Funding as well as details of the proposed special events.

In Market Date: N/A

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to provide incentives to participants for the purpose of promoting the construction of energy efficient residential homes in the Province of Ontario.

Description: This is an energy efficiency initiative that provides incentives to homebuilders for constructing new homes that are efficient, smart, and integrated (applicable to new single family dwellings). Incentives are provided in two key categories as follows:

- Incentives for homebuilders who install electricity efficiency measures as determined by a prescriptive list or via a custom option.
- Incentives for homebuilders who meet or exceed aggressive efficiency standards using the EnerGuide performance rating system.

Targeted End Uses: All off switch, ECM motors, ENERGY STAR® qualified central a/c, lighting control products, lighting fixtures, EnerGuide 83 whole home, EnerGuide 85 whole homes

Delivery: Local engagement of builders will be the responsibility of the LDC and will be supported by IESO air coverage driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: Not in market

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

Target Customer Type(s): Residential and Small Commercial Customers

Initiative Frequency: Year round

Objective: The objectives of this initiative are to enhance the reliability of the IESO-controlled grid by accessing and aggregating specified residential and small commercial end uses for the purpose of load reduction, increasing consumer awareness of the importance of reducing summer demand and providing consumers their current electricity consumption and associated costs.

Description: In ***peaksaver*** PLUS® participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and real-time consumption information on an In Home Display (IHD).

Targeted End Uses: central air conditioning, electric hot water heaters and pool pumps

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: January 2012

C&I Program

EFFICIENCY: EQUIPMENT REPLACEMENT INCENTIVE (ERII) (Schedule C-2)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures.

Description: The Equipment Replacement Incentive Initiative (ERII) offers financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. Upgrade projects can be classified into either: 1) prescriptive projects where prescribed measures replace associated required base case equipment; 2) engineered projects where energy and demand savings and incentives are calculated for associated measures; or 3) custom projects for other energy efficiency upgrades.

Targeted End Uses: lighting, space cooling, ventilation and other measures

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-2. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx.

In Market Date: April 2011

Lessons Learned:

DIRECT INSTALL INITIATIVE (DIL) (Schedule C-3)

Target Customer Type(s): Small Commercial, Institutional, Agricultural facilities and multi-family buildings

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer a free installation of eligible lighting and water heating measures of up to $1,500 to eligible owners and tenants of small commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity and peak demand savings.

Description: The Direct Installed Lighting Initiative targets customers in the General Service <50kW account category. This Initiative offers turnkey lighting and electric hot water heater measures with a value up to $1,500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial $1,500 limit.

Target End Uses: Lighting and electric water heating measures

Delivery: Participants can enroll directly with the LDC, or would be contacted by the LDC/LDC-designated representative.

Additional detail is available:

- Schedule C-3. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: December 2012

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

Target Customer Type(s): Commercial, Institutional, and Agricultural Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to offer incentives for optimizing (but not replacing) existing chilled water systems for space cooling in non-residential facilities for the purpose of achieving implementation phase energy savings, implementation phase demand savings, or both.

Description: This Initiative offers Participants incentives for the following:

- scoping study phase
- investigation phase
- implementation phase
- hand off/completion phase

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-6. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx.

In Market Date: April 2011

NEW CONSTRUCTION AND MAJOR RENOVATION INITIATIVE (HPNC) (Schedule C-4)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to encourage builders/major renovators of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other Measures.

Description: The New Construction initiative provides incentives for new buildings to exceed existing codes and standards for energy efficiency. The initiative uses both a prescriptive and custom approach.

Targeted End Uses: New building construction, building modeling, lighting, space cooling, ventilation and other Measures

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

- Schedule C-4. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx.

In Market Date: December 2011

ENERGY AUDIT INITIATIVE (Schedule C-1)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to offer incentives to owners and lessees of commercial, institutional, multi-family buildings and agricultural facilities for the purpose of undertaking assessments to identify all possible opportunities to reduce electricity demand and consumption within their buildings or premises.

Description: This initiative provides participants incentives for the completion of energy audits of electricity consuming equipment located in the facility. Energy audits include development of energy baselines, use assessments and performance monitoring and reporting.

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-1. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx.

In Market Date: February 2012

Industrial Program

PROCESS & SYSTEMS UPGRADES INITIATIVE (PSUI) (Schedule D-1)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

Objectives: The objectives of this initiative are to:

- Offer distribution customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;
- Implement system optimization project in systems which are intrinsically complex and capital intensive; and
- Increase the capability of distribution customers to implement energy management and system optimization projects.

Description: PSUI is an energy management initiative that includes three initiatives: (preliminary engineering study, detailed engineering study, and project incentive Initiative). The incentives are available to large distribution

connected customers with projects or portfolio projects that are expected to generate at least 350 MWh of annualized electricity savings or, in the case of Micro-Projects, 100 MWh of annualized electricity savings. The capital incentive for this Initiative is the lowest of:

a) $200/MWh of annualized electricity savings

b) 70% of projects cost

c) A one year pay back

Targeted End Uses: Process and systems

Delivery: LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-1. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: April 2011

MONITORING & TARGETING INITIATIVE (Schedule D-2)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

Objective: This initiative offers access to funding for the installation of Monitoring and Targeting ("M&T") systems in order to deliver a minimum savings target at the end of 24 months and sustained for the term of the M&T Agreement.

Description: This initiative offers customers funding for the installation of a M&T system to help them understand how their energy consumption might be reduced. A facility energy manager, who regularly oversees energy usage, will now be able to use historical energy consumption performance to analyze and set targets.

Targeted End Uses: Process and systems

Delivery: LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-2. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: April 2011

ENERGY MANAGER INITIATIVE (Schedule D-3)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

Objective: The objective of this initiative is to provide customers and LDCs the opportunity to access funding for the engagement of energy managers in order to deliver a minimum annual savings target.

Description: This initiative provides customers the opportunity to access funding to engage an on-site, full time embedded energy manager, or an off-site roving energy manager who is engaged by the LDC. The role of the energy manager is to take control of the facility's energy use by monitoring performance, leading awareness programs, and identifying opportunities for energy consumption improvement, and spearheading projects. Participants are funded 80% of the embedded energy manager's salary up to $100,000 plus 80% of the energy manager's actual reasonable expenses incurred up to $8,000 per year. Each embedded energy manager has a target of 300 kW/year of energy savings from one or more facilities. LDCs receive funding of up to $120,000 for a Roving Energy Manager plus $8,000 for expenses.

Targeted End Uses: Process and systems

Delivery: LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-3. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: April 2011

KEY ACCOUNT MANAGER (KAM) (Schedule D-4)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

Objective: This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI.

Description: This initiative provides LDCs the opportunity to utilize a KAM to assist their customers. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

Targeted End Uses: Process and systems

Delivery: LDC delivered

Additional detail is available:

- ScheduleD-4. Available on IESO's extranet.

In Market Date: December 2012

DEMAND RESPONSE 3 (Schedule D-6)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

Objective: This initiative provides for Demand Response ("DR") payments to contracted participants to compensate them for reducing their electricity consumption by a pre-defined amount during a DR event.

Description: Demand Response 3 ("DR3") is a demand response initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

Targeted End Uses: Commercial and Industrial Operations

Delivery: DR3 is delivered by Demand Response Providers ("DRPs"), under contract to the IESO. The IESO administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). IESO provides administration including settlement, measurement and verification, and dispatch. LDCs are responsible for local customer outreach and marketing efforts.

Additional detail is available:

- Schedule D-6. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx

In Market Date: January 2011

It is noted that while the schedule for this initiative was not posted until May 2011, the Aggregators reported that they were able to enroll customers as of January, 2011.

LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

Objective: The objective of this initiative is to offer free installation of energy efficiency measures to income qualified households for the purpose of achieving electricity and peak demand savings.

Description: This is a turnkey initiative for income qualified customers. It offers residents the opportunity to take advantage of free installation of energy efficient measures that improve the comfort of their home, increase efficiency, and help them save money. All eligible customers receive a Basic and Extended Measures Audit, while customers with electric heat also receive a Weatherization Audit. The Initiative is designed to coordinate efforts with gas utilities.

Targeted End Uses: End use measures based on results of audit (i.e., CFL bulbs)

Delivery: LDC delivered.

Additional detail is available:

- Schedule E. Available on IESO's extranet.

In Market Date: December 2012

Appendix B: Pre-2011 Programs

ELECTRICITY RETROFIT INCENTIVE PROGRAM

Target Customer Type(s): Commercial, Institutional, and Agricultural Customers

Initiative Frequency: Year Round

Objective: The objective of this initiative is to offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures.

Description: The Equipment Replacement Incentive Program (ERIP) offered financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. This program was available in 2010 and allowed customers up to 11 months following Pre-Approval to complete their projects. As a result, a number of projects Pre-Approved in 2010 were not completed and in-service until 2011. The electricity savings associated with these projects are attributed to 2011.

Targeted End Uses: Electricity savings measures

Delivery: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

Target Customer Type(s): Commercial, Institutional, and Agricultural Customers

Initiative Frequency: Year round

Objective: The High Performance New Construction Initiative provided incentives for new buildings to exceed existing codes and standards for energy efficiency. The Initiative uses both a prescriptive and custom approach and was delivered by Enbridge Gas under contract with the IESO (and subcontracted to Union Gas), which ran until December 2010.

Description: The objective of this initiative is to encourage builders of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other Measures.

Targeted End Uses: New building construction, building modeling, lighting, space cooling, ventilation and other measures

Delivery: Through Enbridge Gas (and subcontracted to Union Gas)

MULTIFAMILY ENERGY EFFICIENCY REBATES

Target Customer Type(s): Residential Multi-unit buildings

Initiative Frequency: Year round

Objective: Improve energy efficiency of Multi-unit building

Description: IESO's Multifamily Energy Efficiency Rebates (MEER) Initiative applies to multifamily buildings of six units or more, including rental buildings, condominiums, and assisted social housing. The IESO contracted with GreenSaver to deliver the MEER Initiative outside of the Toronto Hydro service territory. Activities delivered in Toronto were contracted with the City of Toronto.

Similar to ERII and ERIP, MEER provides financial incentives for prescriptive and custom measures, but also funds resident education. Unlike ERII, where incentives are paid by the LDC, all incentives through MEER are paid through the contracted partner (i.e. GreenSaver).

Targeted End Uses: Electricity saving measures

Delivery: IESO contracted with Greensaver