



September 30, 2014

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
Suite 2700, PO Box 2319
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: OEB File No. EB-2010-0215
Oakville Hydro Electricity Distribution Inc.
Conservation and Demand Management – 2013 Annual Report**

Please find accompanying this letter two copies of Oakville Hydro Electricity Distribution Inc.'s 2013 Conservation and Demand Management ("CDM") Report. This CDM Report has been prepared in accordance with Section 2.2 of the *Conservation and Demand Management Code for Electricity Distributors*.

Should there be any questions, please do not hesitate to contact me.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read "Amanda Kennedy", is written over the "Respectfully Submitted," text.

Amanda Kennedy
Vice President, Communications & Conservation
Chief Conservation Officer
Oakville Hydro Electricity Distribution Inc.
P.O. Box 1900, 861 Redwood Square
Oakville, ON L6K 0C7
Telephone: 905-825-4451
Email: akennedy@oakvillehydro.com

Oakville Hydro Electricity Distribution Inc.

Conservation and Demand Management 2013 Annual Report

**Submitted to:
Ontario Energy Board
EB-2010-0215**

Submitted on September 30, 2014

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND.....	4
1 BOARD-APPROVED CDM PROGRAM	6
1.1 INTRODUCTION	6
1.2 TOU PRICING	6
1.2.1 BACKGROUND	6
1.2.2 TOU PROGRAM DESCRIPTION.....	6
1.3 OAKVILLE HYDRO'S APPLICATION WITH THE OEB.....	8
1.4 OAKVILLE HYDRO'S APPLICATION WITH THE OPA'S CONSERVATION FUND	8
2 OPA-CONTRACTED PROVINCE-WIDE CDM PROGRAMS.....	9
2.1 INTRODUCTION	9
2.2 PROGRAM DESCRIPTIONS	13
2.2.1 CONSUMER PROGRAM.....	13
2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM.....	25
2.2.3 INDUSTRIAL PROGRAM.....	33
2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1).....	37
2.2.5 PRE-2011 PROGRAMS.....	37
3 2013 LDC CDM RESULTS.....	38
3.1 PARTICIPATION AND SAVINGS.....	38
3.2 EVALUATION.....	42
3.3 SPENDING.....	47
3.4 ADDITIONAL COMMENTS	50
4 COMBINED CDM REPORTING ELEMENTS	51
4.1 PROGRESS TOWARDS CDM TARGETS.....	51
4.2 VARIANCE FROM STRATEGY	52
4.3 OUTLOOK TO 2014 AND STRATEGY MODIFICATIONS.....	54

5 CONCLUSION	57
APPENDIX A: INITIATIVE DESCRIPTIONS	58
APPENDIX B: PRE-2011 PROGRAMS	71
APPENDIX C: 2013 EVENTS SCHEDULE.....	72

Executive Summary

This 2013 Annual Report is submitted by Oakville Hydro Electricity Distribution Inc. (“Oakville Hydro”) in accordance with the filing requirements set out in the Conservation and Demand Management (“CDM”) Code (Board File No. EB-2010-0215), specifically Appendix C: Annual Report Template, as a progress report and modification to Oakville Hydro’s CDM Strategy. Accordingly, this Report outlines Oakville Hydro’s CDM activities for the period of January 1, 2013 to December 31, 2013. It includes the reported net peak demand and net energy savings achieved from 2011, 2012 and 2013, with a summary of CDM program activities, successes and challenges. This Report also includes an updated forecast of the expected net peak demand and cumulative net energy savings to the end of 2014.

On February 25, 2011, Oakville Hydro entered into a contract with the Ontario Power Authority (the “OPA”) to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs (“OPA Programs”) to all customer segments including residential, commercial, institutional, industrial and low income. As set out in Oakville Hydro’s CDM Strategy, filed with the OEB on November 1, 2010, the OPA Programs were anticipated to deliver approximately 64% of Oakville Hydro’s net peak demand reduction target and 92% of the cumulative net energy savings target.

In 2013, Oakville Hydro continued to focus on the delivery of the OPA Programs, build on its peak demand and energy savings and saw continuing strong results in many areas. This is evident by participation levels at or above Oakville Hydro’s 1.3% share of the Provincial results for most Consumer Program initiatives. Specifically, the full roll-out in 2013 of the Residential Demand Response Program (the “RDR initiative”) which was launched in December 2012, included over 4,458 residential enrolments which represents 7.6% of Oakville Hydro’s residential customer base. In addition, Oakville Hydro had an increase in the number of new applications received for the Retrofit initiative of 17% versus 2012. In 2013 Oakville Hydro had new participation of three Energy Audits which provided incremental peak demand and energy savings. Lastly, the launch of the HOME ASSISTANCE Program had a positive contribution to Oakville Hydro’s targets.

Of concern is Oakville Hydro’s lower net peak contribution per unit for the RDR Initiative compared to the provincial average. According to the OPA Final 2013 Verified Results Report the net contribution per RDR control device is 31% less for Oakville Hydro than the Provincial-wide average. This difference represents a potential 1 MW loss or 5% of Oakville Hydro’s Peak Demand target. An enquiry for further information as to why Oakville Hydro’s results for this program differ from the provincial average has been submitted to the OPA.

As of December 2013, Oakville Hydro has achieved 6.8 MW of net peak demand savings and 55.7 GWh of cumulative net energy savings in 2013, based on information published by the OPA in its Final 2013 Verified Results Report. These results represent 32.7% of Oakville Hydro’s four-year net peak demand reduction target and 75.3% of the cumulative net energy savings target. It is important to note the net peak demand savings results reflect ‘Scenario 2’, assuming a persistence of demand savings from both the RDR initiative and the Demand

Response 3 Program, and includes 2.5 MW of demand response achievements that are subject to change during the final OPA evaluation, measurement and verification process at the end of 2014.

A summary of Oakville Hydro's achievements towards the CDM targets is shown in Table 1:

Table 1: Verified and Forecast Net Peak Demand and Cumulative Net Energy Reduction (Scenario 2)

	2011 Verified^[1]	2012 Verified ^[2]	2013 Verified	2014 Forecast	% of 2014 CDM Target	CDM Target
Net Peak Demand Savings (MW)	2.2	3.5	6.8	9 – 13	44 – 62	20.7
Cumulative Net Energy Savings (GWh)	26.9	45.1	55.7	61 – 62	82 – 83	74.06

As noted in the Guidelines for Electricity Distributor Conservation and Demand Management, released April 26, 2012, the OEB has deemed Time-of-Use (“TOU”) pricing a Province-wide Board-Approved CDM Program. The OPA is to provide measurement and verification on Savings (Peak Demand and Cumulative Energy) attributable to the introduction of TOU pricing. At the time of this Report the OPA has not released any verified results of Savings attributable to TOU pricing for Oakville Hydro.

This unknown contribution from the Time-of-Use rate impact, combined with the lower demand contribution of the RDR initiative, impacts Oakville Hydro's ability to provide a defined forecast for 2014. As shown in Table 1 above, Oakville Hydro has stated its 2014 net peak demand forecast as a range that reflects this variability of the net results. In the best case scenario, Oakville Hydro may achieve 12.6 MW or 61% of its net peak demand reduction target. In the worst case scenario, Oakville Hydro may achieve only 9.2 MW or 44% of its net peak demand reduction target. For cumulative net energy savings the achievable target has a range of 82 to 83% by the end of 2014.

Oakville Hydro's anticipated shortfall for achievement of its targets include the limited market potential for the Industrial Program, limited commercial growth and some Commercial and Institutional Program initiatives within the service area of Oakville Hydro, declining participation

¹ Excluding adjustments reported by the OPA for 2011 in the 2012 Final Verified Results Report

² Excluding adjustments reported by the OPA for 2012 in the 2013 Final Verified Results Report

rates and revised expectations for net-to-gross ratios for Consumer Program initiatives as well as some longstanding OPA program initiatives that have reached saturation.

The challenges faced by Oakville Hydro in its efforts to achieve its CDM targets are common to many other LDCs. Oakville Hydro's largest challenge is achieving the net peak demand target with a limited growth commercial and industrial customer base. This is consistent with the Final 2013 Verified Results Report data which indicates 55 LDCs have achieved less than 50% of their target for net peak demand reduction as of the end of 2013. On the other hand, Oakville Hydro's cumulative net energy savings reduction, at 75.3% of its target at the end of 2013 is slightly behind the Province-wide average for all LDCs.

Although the current forecast indicates uncertainty in meeting its CDM targets, Oakville Hydro will continue to dedicate and explore opportunities to capture its CDM market potential across all customer classes. Oakville Hydro will strive to increase participation in key OPA Programs and initiatives in an effort to maximize results toward its CDM targets by 2014.

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 Ontario Energy Board (the “OEB” or the “Board”) to establish Conservation and Demand Management (“CDM”) targets to be met by electricity distributors (the “March 2010 Ministerial Directive”). Accordingly, on November 12, 2010, the OEB amended the distribution licence of Oakville Hydro to require Oakville Hydro, as a condition of its licence, to achieve 20.70 MW of net peak demand savings and 74.06 GWh of cumulative net energy savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the March 2010 Ministerial 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 licences. To comply with the requirements of the Code, Oakville Hydro submitted its CDM Strategy on November 1, 2010 which provided, at a high level, a description of how Oakville Hydro intended to achieve its CDM targets.

On February 7, 2011 Oakville Hydro filed an addendum to its CDM Strategy listing the anticipated program administration budgets for the OPA-Contracted Province-Wide CDM Programs (“OPA Programs”) and potential Board-Approved CDM Programs.

The Code also requires a distributor to file annual reports with the Board. This is the third Annual Report filed by Oakville Hydro and has been prepared in accordance with the requirements of the Code and covers the period from January 1, 2013 to December 31, 2013.

Oakville Hydro submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Oakville Hydro for the January 1, 2011 to December 31, 2011 period. The OEB’s “Conservation and Demand Management Report – 2011 Results”, published on December 20, 2012, identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs negatively impacted the final 2011 results for the local distribution companies (“LDCs”). This issue was also highlighted in Volumes I & II of the Environmental Commissioner’s Report on Ontario’s Annual Energy Conservation Progress Report – 2011”.³

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (the “OPA”) to fund CDM programs which meet the definition and criteria for OPA-Contracted Province-Wide CDM Programs for an additional one-year period from January 1, 2015 to December 31, 2015 (the “December 2012 Ministerial Directive”).

The Ministerial Directive to date has not amended the timelines for LDCs to achieve their energy savings and demand savings targets. Therefore, the main focus of the Oakville Hydro’s efforts

³ Volume One was published on June 5, 2012 and Volume 2 was published on January 8, 2013

remains the achievement of CDM targets by December 31, 2014. Oakville Hydro will file an exemption to its Distributor System Code in late fall 2014 in the event it is readily apparent that the targets will not be met for December 31, 2014.

The OEB's "Conservation and Demand Management Report - 2012 Results", published on December 5, 2013 identified that the majority of LDCs have achieved close to 20% of their net peak demand (MW) target from their 2012 results. However, LDCs generally advised the Board that meeting their net peak demand target is not likely and that a shortfall is expected. The report also identified that although there have been improvements to the OPA Programs, there still remains some shortcoming to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. 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.

1 Board-Approved CDM Program

1.1 Introduction

In its Decision and Order dated November 12 2010 (Board File No. EB-2010-0215/0216), the OEB ordered that, (to meet its mandatory CDM targets), *“Each licensed electricity distributor must, as a condition of its license, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two”*.

At this time, the implementation of Time-of-Use (“TOU”) Pricing has been deemed as a Board-Approved CDM Program that is being offered in Oakville Hydro’s service area.

1.2 Time Of Use Pricing

1.2.1 Background

In the Guidelines for Electricity Distributor Conservation and Demand Management released April 26, 2012 (the “CDM Guidelines”), the OEB recognizes 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 has determined that distributors will not have to file a Board-Approved CDM program application regarding TOU pricing. The OEB has 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.

In accordance with the March 2010 Ministerial Directive, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors.

The OPA has not released any verified results of TOU savings to Oakville Hydro. However, the OPA has previously provided an unofficial, preliminary estimate of 170 MW in net peak demand savings for the contribution of TOU pricing on a Province-wide basis. Given that Oakville Hydro’s Residential customer base represents 1.3% of all Residential customers in Ontario, it is forecast that TOU pricing will contribute 1.3% of 170 MW, or 2.26 MW, to Oakville Hydro’s target for net peak demand reduction.

1.2.2 TOU Pricing 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 2:

Table 2: TOU Pricing for RPP Customers

Effective Date	Rates (cents/kWh)		
	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

Delivery:

The OEB set the rates; LDCs install and maintain the smart meters and convert customers to TOU billing.

Initiative Activities/Progress:

Oakville Hydro began transitioning 286 RPP customers to TOU billing in October of 2006 as part of an OEB-approved Smart Meter Pilot Project. By December 31, 2013 there were 60,633 RPP customers being billed using the TOU billing structure. This includes 58,451 Residential and 4,182 General Service <50kW class customers.

Consumer education and awareness activities have included the following activities:

- Billing inserts
- Door hangers
- TOU rate information OEB handbooks
- Newspaper publications
- Public meetings and public presentations

- Community events

1.3 Oakville Hydro's Application with the OEB

Oakville Hydro has not filed any applications for Board-Approved CDM Programs.

1.4 Oakville Hydro's Application with the OPA's Conservation Fund

In 2013, the OPA introduced the Conservation Fund to help meet LDCs 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 OPA portfolio and the means to test concepts for future local or province wide programs post 2014.

Oakville Hydro has not submitted any applications for CDM programs to the OPA's Conservation Fund.

2 OPA-Contracted Province-Wide CDM Programs

2.1 Introduction

Effective February 25, 2011, Oakville Hydro entered into the Master CDM Program Agreement (the “Master Agreement”) with the OPA to deliver OPA Programs and initiatives extending from January 1, 2011 to December 31, 2014. Those programs for which Oakville Hydro has contracted with the OPA are shown in Table 3. Details concerning the OPA Programs are included in Appendix A.

Table 3: OPA Programs Contracted by Oakville Hydro with the OPA

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Consumer Program				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 27, 2011	All residential rate classes	Feb 25, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 27, 2011	All residential rate classes	Feb 25, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 27, 2011	All residential rate classes	Feb 25, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 27, 2011	All residential rate classes	Feb 25, 2011 ⁴
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 27, 2011	All residential rate classes	Feb 25, 2011 ⁴
Retailer Co-op	Not Applicable	Not Applicable	All residential rate classes	Not Applicable
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes	Dec 15, 2012 ⁴
Residential New Construction Program	Schedule B-2	Jan 27, 2011	All residential rate classes	July 1, 2013

⁴ Correction of information provided in the 2011 Annual CDM Report for Oakville Hydro

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Commercial and Institutional Program				
Retrofit Incentive	Schedule C-2	Jan 27, 2011	All general service classes	Feb 7, 2011
Direct Install Lighting	Schedule C-3	Jan 27, 2011	General Service < 50 kW	Feb 25, 2011
Building Commissioning Incentive	Schedule C-6	Jan 27, 2011	All general service classes	Not Applicable
New Construction Initiative	Schedule C-4	Jan 27, 2011	All general service classes	Feb 25, 2011
Energy Audit	Schedule C-1	Jan 27, 2011	All general service classes	Feb 25, 2011 ⁴
Small Commercial Demand Response (part of the Consumer Program)	Schedule B-3	Jan 27, 2011	All general service classes	Dec 15, 2012
Demand Response 3 (part of the Industrial Program)	Schedule D-6	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011
Industrial Program				
Process and System Upgrades	Schedule D-1	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 ⁵
Monitoring and Targeting	Schedule D-2	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 ⁵
Energy Manager	Schedule D-3	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 ⁵
Key Account Manager ("KAM")	Schedule D-4	Apr 4, 2011	General Service 50 kW & above	Not Applicable
Retrofit Incentive (part of the C&I Program)	Schedule C-2	Jan 27, 2011	General Service 50 kW & above	Feb 25, 2011
Demand Response 3	Schedule D-6	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 ⁵

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Home Assistance Program				

⁵ Oakville Hydro provided information to customers interested in the Industrial Program prior to the finalization of the Program Schedules

Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	Jan 15, 2013
-------------------------	--------------	-------------	------------------------------	--------------

In addition, results were realized towards Oakville Hydro's CDM targets through the following pre-2011 Programs:

Initiative	Master Agreement Schedule	Date Schedule Posted	Customer Class
Pre-2011 Programs			
Electricity Retrofit Incentive Program	Not Applicable	Not Applicable	All general service classes
High Performance New Construction	Not Applicable	Not Applicable	All general service classes

As shown in Table 4, several OPA Program initiatives are no longer available to customers or have not been launched in 2012.

Table 4: OPA Program Initiatives Not in-Market

Initiative Not in Market in 2012	Objective	Status
Consumer Program		
Midstream Electronics	The objective of this initiative is to encourage Retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes	Never launched and removed from Schedule B-1 in June 2013.
Midstream Pool Equipment	The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools	Never launched and removed from Schedule B-1 in June 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting	Launched in 2013 by the OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs	Never launched and removed from Schedule B-1 in June 2013.
Commercial and Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011/2012. As per the OPA there no plans to launch this initiative in 2013.

Demand Response 1 ("DR1")	See below	See below
Initiative Not in Market in 2012	Objective	Status
Industrial Program		
Demand Response 1	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 Industrial Program in December 2012.

The Master Agreement includes program change management provision in Article 3. Collaboration between the OPA and LDCs commenced in 2011 and has continued since then, as the change management process was implemented to enhance the OPA Program suite. While the change management process allows for modifications to the Master Agreement and initiative Schedules, the process continues to be extremely time-consuming and does not lend itself to appropriate responsiveness to market requirements. The ability to make enhancements to OPA Programs / initiatives in a more timely manner would give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drive participation in the initiatives.

2.2 Program Descriptions

Full descriptions of the OPA Programs are available on the OPA's website at <http://www.powerauthority.on.ca/lbc-province-wide-program-documents> 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.

2.2.1 Consumer Program

Description:

Provides residential customers with programs and tools to help them understand and manage the amount of energy they use throughout their entire home and protect the environment. The Consumer Program portfolio includes initiatives offering customers incentives for the use of energy-efficient equipment.

Targeted Customer Type(s):

Residential

Objective:

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

Discussion:

The Consumer Program portfolio is predominately a carryover of initiatives from previous CDM programs. Customer participation in many of the initiatives is often driven by product / service providers including Retailers and residential Heating, Ventilation and Air Conditioning ("HVAC") contractors, a number of which may not have fully delivered what was anticipated.

As shown in Table 4, three new initiatives were never launched by the OPA and were subsequently removed from the Consumer Program portfolio in 2013, with no other new initiatives added.

Delays in communication with regards to initiative offerings and results reporting have hampered the ability of LDCs to engage customers and promote participation.

Province-wide advertising by the OPA was substantially curtailed for much of 2012 and the first half of 2013 but was increased in Q3, 2013. This provided limited value due to the late market entry, especially for the Residential Demand Response Initiative (the "RDR initiative", also known as **peaksaver PLUS**[®]). Customer confusion was also created through the provincial marketing of **peaksaver PLUS** and the Heating and Cooling Incentive at the same time as the respective messages were general and of a high level.

The most important of the Consumer Program initiatives with respect to the provision of Savings are the RDR initiative, the HVAC Incentives initiative, and the Appliance Retirement initiative (also known as Fridge & Freezer Pick-up). The RDR initiative is a continuation of an earlier similar program with the additional inclusion of an In-Home Energy Display (“IHD”) at no cost to the customer. It was initially believed that use of the IHD by customers would result in additional savings; however, the OPA has not yet found conclusive evidence to support this and no demand or energy savings have been reported for the installations of this equipment.

Both the HVAC Incentives and the Appliance Retirement initiatives are also continuations of earlier similar programs for which no enhancements have been introduced since prior to 2011. In these cases, Province-wide customer participation rates have declined (Appliance Retirement) or are stagnant and should be considered signs that adjustments are likely necessary in order to stimulate new interest by customers. The addition of Light Emitting Diode (LED) lighting measures to the Bi-Annual Retailer Event and also the Annual Coupon initiative in July 2013 has had a positive impact on customer participation. In Q1/Q2 2013 the OPA released Version 5 of the Master Agreement Schedule that increased the number of LDC coded coupons available for distribution to LDC customers and added new equipment installations to the HVAC Incentives initiative.

Based on the data published by the OPA in its Final 2013 Verified Results Report, Oakville Hydro has experienced higher-than-average participation rates in both the Appliance Retirement and the HVAC Incentives initiatives since 2011. In addition, response to the RDR initiative has been very strong.

Oakville Hydro’s Residential customer base represents about 1.3% of the Province-wide total, but the activity level for the Appliance Retirement initiative in 2013 was 1.8% of the Province-wide results, and for the HVAC Incentives initiative was 2.3% of the Province-wide results. Both RDR measures (programmable thermostat and electronic switch for pumps and water heaters) and IHD showed strong support respectively with 5.0% and 4.6% to that of the Province-wide results.

In 2013, Oakville Hydro Oakville Hydro created a unique conservation campaign, Oakville Saves! to build awareness and deliver conservation programs to all of its customers in partnership with the Ontario Power Authority under the provincial umbrella of saveONenergy.

2.2.1.1 Appliance Retirement Initiative (Schedule B-1, Exhibit D)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of eligible appliances decommissioned was 372 units, or 1.8% of the Province-wide result of 20,952 units

Net Savings

- 24 kW peak incremental peak demand savings and 159,304 kWh incremental energy savings

Contribution to CDM Targets

- 104 kW program-to-date net peak demand savings in 2014
- 2,441,950 kWh program-to-date, 2011-2014 cumulative net energy savings

Marketing & Promotional Tactics Used:

- Bill statement inserts distributed to approximately 60,000 households, one campaign in March (cross promotion with HVAC Incentives and **peaksaver PLUS**)
- Promotion in local newspapers and other publications:
 - A total of 15 ads were placed in the following media publications having a total circulation of just under 600,000 households:
 - Town of Oakville “Parks, Recreation & Culture Program Guide”;
 - West of the City Insert;
 - Urban Living;
 - Oakville Beaver; and,
 - The Halton Enviro Guide
- Promotion at public community events (see Appendix C):
 - Eleven events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 430 people
 - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 1,500 people
 - Fifteen community-related event days interacting with over 2,090 people
 - Distributed collateral materials for all Consumer Program initiatives at all events
- Just Junk Google search engine optimization generating 2,059 visits and 3,298 page views
- Promotion on Oakville Hydro’s website throughout 2013, 38 page-views with an average of time on page of over 100 seconds

- Deployed two email blast campaigns (in September and October) with a distribution of approximately 12,300 using AIRMILES® promotion (cross promotion with the HVAC Incentives and **peaksaver PLUS**)

Additional Comments:

- This initiative (previously known as The Great Refrigerator Round-Up) has been offered by Oakville Hydro and other LDCs since 2007. Oakville Hydro has had strong participation in this initiative through the years; however, the participation rate may be approaching market saturation as appliances have a natural life cycle and because of the revised eligibility age requirement of 20 years. The number of eligible appliances retired by customers of Oakville Hydro in 2013 declined by 38% versus 2012, mirroring the overall Province-wide results, which declined by approximately 39%.
- Historically, participation rates in this initiative have been responsive to Province-wide advertising by the OPA, supported by LDCs. In both 2012 and 2013, however, the OPA provided no advertising support for this initiative.
- In an effort to capture additional savings from this initiative, the eligibility requirement for refrigerators was revised to 15 years old from 20 years old in Q2, 2014.

2.2.1.2 Appliance Exchange Initiative (Schedule B-1, Exhibit E)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of eligible appliances exchanged was 54 units, or 1.0% of the Province-wide result of 5,337 units

Net Savings

- 11 kW peak incremental peak demand savings and 19,950 kWh incremental energy savings

Contribution to CDM Targets

- 18 kW program-to-date net peak demand savings in 2014
- 81,544 kWh program-to-date, 2011-2014 cumulative net energy savings

Marketing & Promotional Tactics Used:

- Promotion over two days held at Canadian Tire location in June, interacting with 67 customers (see Appendix C for event list):
- Distributed collateral materials for all Consumer Program initiatives at all events
- Newspaper Ad in Oakville Beaver with a circulation of approximately 52,000
- Promotion on Oakville Hydro's website throughout 2013, more than 900 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- Since 2011, the number of eligible appliances exchanged for Oakville Hydro and Province-wide continues to trend higher. The number of eligible appliances retired by customers of Oakville Hydro in 2013 increased by 56% versus 2012, significantly higher than the overall Province-wide results, which increased by 39%
- Eligible products and incentive amounts for this initiative are influenced by Retailers with no direct involvement from Oakville Hydro. The restrictive, limited and sometimes non-participation of local Retailers can diminish the potential Savings for this initiative.
- There was only one Retailer participant (Canadian Tire) in this initiative in the spring of 2013.

2.2.1.3 HVAC Incentives Initiative (Schedule B-1, Exhibit B)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of eligible furnaces and central air conditioners (“CACs”) installed was 2,078 units, or 2.3% of the Province-wide result of 91,581 units

Net Savings

- 408 kW peak incremental peak demand savings and 664,712 kWh incremental energy savings

Contribution to CDM Targets

- 1,519 kW program-to-date net peak demand savings in 2014 excluding reductions to the results reported for 2011 and 2012
- 8,329,497 kWh program-to-date, 2011-2014 cumulative net energy savings excluding adjustments to the results reported for 2011 and 2012

Marketing & Promotional Tactics Used:

- Bill statement inserts distributed to approximately 60,000 households, one campaign in March (cross promotion with Fridge and Freezer Pickup and **peaksaver** PLUS)
- Promotion in local newspapers and other publications:
 - A total of 13 ads were placed in the following media publications having a total circulation of 528,862:

Town of Oakville Parks “Recreation & Culture Program Guide”;
West of the City Insert;
Urban Living; and,
The Oakville Beaver

- Promotion at public / community events (see Appendix C for event list):
 - Eleven events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 430 people
 - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 1,500 people
 - Fifteen community-related event days interacting with over 2,090 people
 - Distributed collateral materials for all Consumer Program initiatives at all events
- Local arena advertising generating over 200,000 impressions
- Deployed two email blast campaigns (in September and October.) with a distribution of 12,312 using AIRMILES promotion (cross promotion with Fridge and Freezer Pickup and **peaksaver** PLUS)
- Promotion on Oakville Hydro’s website throughout 2013, more than 1,200 page-views on Oakville Hydro’s Conservation ‘landing page’ for all OPA Programs

Additional Comments:

- The OPA has made small adjustments to its previously-published figures for 2012 for this initiative.
- The number of HVAC incentives provided to customers of Oakville Hydro in 2013 increased by 2.4% versus 2012, whereas the overall Province-wide results increased by approximately 4.8%. Overall, participation in this initiative has been flat with an average of 2,000 eligible furnaces and CACs per year.
- Incentive levels may be insufficient to prompt customers to upgrade HVAC equipment prior to end of useful life. An AIRMILES incentive was introduced in 2013 to try and encourage early replacement.
- This initiative is contractor-driven, centrally-managed by the OPA through the Heating, Refrigeration and Air Conditioning Institute of Canada (“HRAI”); with LDCs primarily responsible for local marketing efforts. In an effort to build capability, the OPA instituted mandatory training for all participating HVAC contractors. It has been noted that there are approximately 4,500-5,000 HVAC contractors in the Province, yet in 2013 only 1,587 contractors completed the mandatory HVAC training. Many residential HVAC contractors are not necessarily licensed or members of the HRAI creating a challenge for higher enrollment.
- There may be cases where non-participating HVAC contractors are offering their own incentives, by discounting their installations to match value of the OPA incentive, to make this sale. As this occurs outside of the initiative, these installations and the resulting demand and energy savings are not credited to LDCs.
- Changes to the Schedule in 2014 to allow for incentives for new installations of CACs, rather than strictly replacement units, may provide greater Initiative results.

2.2.1.4 Conservation Instant Coupon Initiative (Schedule B-1, Exhibit A)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of coupons redeemed was 5,076 coupons, or 1.5% of the Province-wide result of 346,896 coupons

Net Savings

- 8 kW peak incremental peak demand savings and 112,774 kWh incremental energy savings

Contribution to CDM Targets

- 28 kW program-to-date net peak demand savings in 2014
- 1,391,806 kWh program-to-date, 2011-2014 cumulative net energy savings excluding an increase to the results reported for 2011

Marketing & Promotional Tactics Used:

- Promotion at public / community events (see Appendix C for event list):
 - Eleven events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 430 people
 - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 1,500 people
 - Fifteen community-related event days interacting with over 2,090 people
 - Distributed collateral materials for all Consumer Program initiatives at all events
- Promotion on Oakville Hydro's website throughout 2013, more than 900 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- The number of eligible coupons used by customers of Oakville Hydro in 2013 increased by over 1,000% versus 2012, as was the case for the Province-wide results. Whereas in 2012 coupons were not available until September, in 2013 they were available much earlier in the year.
- Coupon booklets were not printed and mailed out in either 2012 or 2013 but were only available on-line. Consumers may not have been aware of the availability of the on-line coupons. Results for this initiative were much stronger in 2011, when coupons were printed and mass-mailed to households throughout the Province
- In 2013, LDCs were provided with three custom-coded coupons. All coupons in 2014 are custom-coded which allows LDCs to promote the initiatives based on local preferences.

- Consumer experience varies amongst participating Retailers. For example, a particular high volume 'participating Retailer' does not accept coupons and has their own procedure to provide the incentive. In addition, some Retailers have static lists of eligible products and will not discount eligible products unless the product is on the list.
- The timeframe for Retailer submission of redeemed coupons continues to vary from Retailer to Retailer and in some cases has been lengthy. The delay in reporting accurate participation results to LDCs limits the ability to react and respond to initiative performance or changes in consumer behaviour.

2.2.1.5 Bi-Annual Retailer Event Initiative (Schedule B-1, Exhibit C)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of coupons redeemed was 13,823 coupons, or 1.5% of the Province-wide result of 944,772 coupons

Net Savings

- 17 kW peak incremental peak demand savings and 251,367 kWh incremental energy savings

Contribution to CDM Targets

- 64 kW program-to-date net peak demand savings in 2014
- 3,398,240 kWh program-to-date, 2011-2014 cumulative net energy savings excluding an increase to the results reported for 2011

Marketing & Promotional Tactics Used:

- Promotion at nine events held at Canadian Tire and Home Depot locations in the spring and fall, interacting with over 300 customers (see Appendix C for event list):
- Distributed collateral materials for all Consumer Program initiatives at all events
- Promotion on Oakville Hydro's website throughout 2013, more than 900 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs
- Advertising in West of the City and Urban Living publications

Additional Comments:

- Participation rates for Oakville Hydro for this initiative in 2013 decreased by 11% versus 2012, mirroring the trend in the overall Province-wide results.
- This initiative is strongly influenced by the support offered by participating Retailers which are contracted centrally by the OPA. The local outlets of these Retailers, however, exhibit a wide range of support with respect to the initiative. For example, Retailer staff are not always

provided with any information or training to support an event. This limits the potential participation rates and Savings for this initiative.

- While LDCs have the opportunity to stage in-store events to drive the distribution of LDC-coded coupons and the promotion of other CDM Program initiatives, this requires cooperation from the Retailer and staffing by the LDC.
- The product list has changed very little over the past five years. Program evolution, including new products and review of incentive pricing for all initiatives involving coupons, must be a regular activity to ensure continued consumer interest.

2.2.1.6 Retailer Co-op Initiative

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

None; initiative was not available from the OPA

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- None

Additional Comments:

- None

2.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- None; however, 600 preliminary applications for new homes was received.

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- In 2013, Oakville Hydro entered into an agreement with a third party agent with the task of reaching out to new home builders to explain the program and assist with the application submission process. This produced over 600 preliminary applications for homes under construction in 2013 and is expected to generate a significant number of final applications in 2014.

Additional Comments:

- To date there has been limited participation Province-wide in this initiative; only 131 homes in total for the period of 2011 to 2013. The application process, which initially required one application for each new home, presented an administrative challenge for builders who are building multiple houses in a subdivision. This process was changed in December 2012 allowing for multiple homes on one application. In addition, typical feedback from new home builders is the incentives available are too low. As such, Oakville Hydro did not introduce the initiative until July 2013.
- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this initiative and drive behavioural changes in new home buyers, LDCs need to provide education to the consumers regarding the long term benefits of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer. Current funding for the Consumer Program portfolio does not provide sufficient funds for such activities.

2.2.1.8 Residential Demand Response Initiative (Schedule B-3)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of load control devices installed saw a net increase of 3,686 from 2012, or 5% of the Province-wide result of 73,345 net new load control devices installed in 2013
- Number of IHDs installed saw a net increase of 3,405, or 4.1% of the Province-wide 2013 result of 83,968 IHDs installed

Net Savings

- 1,303 kW peak incremental peak demand savings (calculated) and 5,145 kWh incremental energy savings resulting from the installation of load control devices
- No incremental peak demand savings or energy savings are attributed to the installation of IHDs

Contribution to CDM Targets

- 1,658 kW program-to-date net peak demand savings in 2014 (applies to Scenario 2 only)
- 8,828 kWh program-to-date, 2011-2014 cumulative net energy savings

Marketing & Promotional Tactics Used:

- Bill statement inserts distributed to approximately 60,000 residential households
- On-bill promotion to approximately 60,000 residential households
- Five addressed direct mail campaigns to approximately 120,837 residential customers which included one direct mail campaign using the AIRMILES promotion
- Promotion at public / community events (see Appendix C for event list):
 - Eleven in-store events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 430 people
 - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 1,500 people
 - Fifteen community-related event days interacting with over 2,090 people
 - Distributed collateral materials for all Consumer Program initiatives at all events
- Local arena advertising generating over 800,000 impressions
- Online banner advertising on The Weather Network, generating 1,282,000 impressions
- Promotion on Oakville Hydro's website throughout 2013, more than 696 OPA links and 3,150 page-views with an average 152 seconds time on page
- Deployed two email blast campaigns (Sept. and Oct.) with a distribution of 12,312 using AIRMILES® promotion (cross promotion with Fridge and Freezer Pickup and HVAC Incentives)

Additional Comments:

- Oakville Hydro experienced significant customer participation in this initiative program outperforming the provincial average. Year after year growth suggests a market that has not reached saturation.
- Although incremental activity has trended upward, savings attributed to each control device installed has trended downward and is significantly less than the provincial average. As illustrated in Chart 1, the average net contribution per device for Oakville Hydro in 2013 is 0.37 kW compared to that of the Provincial average of 0.54 kW. Oakville Hydro is currently working with the OPA on why such a variance exists and remains outstanding as at September 30, 2014.

Chart 1: Attributable kW savings per RDR control device

	2011	2012	2013
Oakville Hydro attributable kW Savings / RDR control device	0.56	0.46	0.37
Provincial Average attributable kW Savings / RDR device	0.56	0.48	0.54
Difference (kW)	0	0.02	0.17

The impact of this 0.17 kW delta is significant and represents a loss of 0.76 MW toward Oakville Hydro's target in 2013. As illustrated in Chart 2 below, the implications of this lower value also has a significant impact on Oakville Hydro's results in 2014. Combined, this shortfall of 1.1 MW translates into a 5.3% loss toward Oakville Hydro's total target. Oakville Hydro has notified the OPA of this discrepancy and an investigation is now underway.

Chart 2: Attributable kW savings per RDR control device

	2013	2014*	Total
Total Number of installed devices	4,458	2,225	6,683
Current OHEDI contribution based on 0.37 kW	1,658	827	2,485
OHEDI contribution based on Provincial Average of 0.54 kW	2,416	1,206	3,622
Possible kW Loss to Oakville Hydro (kW)	-758	-379	-1,137

*Represents 2014 target

- There are concerns about performance limitations of the IHD with the optical sensor, including inaccurate readings, the inability of the device to communicate over a long distance from the smart meter and its inability to adapt to statutory holidays for off peak energy pricing. This equipment can be prone to mis-alignment of the optical sensor during and following installation. This suggests that continuation of this initiative may require

technology that communicates directly with the smart meter, which will necessitate early replacement of the Sensus meters installed by Oakville Hydro and higher-cost IHDs.

- The 2012 evaluation indicated savings realized from the IHD were not statistically significant. This impacts the cost effectiveness of the initiative and the value of continuing to offer the IHD if no savings can be attributed.

2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

Description:

Provides non-residential customers 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. The Commercial and Industrial (“C&I”) Program portfolio includes initiatives to help fund energy audits, to replace energy-wasting equipment or to pursue new construction that exceed our 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 the growth of a culture of conservation among these communities as well as the supply chains which serve them.

Discussion:

The C&I Program portfolio is comprised of three initiatives that are continuations of previous initiatives as well as two new initiatives. Similar to many of the initiatives in the Consumer Program portfolio, customer interest in participating in the C&I Program is largely driven by supply channel partners such as commercial lighting contractors, commercial Heating, Ventilation, Air Conditioning and Refrigeration (“HVACR”) contractors, and other parties.

The most important of the C&I Program initiatives with respect to the provision of Savings is the Retrofit Initiative (also known as the Efficiency Equipment Replacement Incentive Program) and the Direct Install Lighting (“DIL”) initiative (also known as the Small Business Lighting Program). Both are continuations of earlier programs that have been refined over time, particularly to increase the incentives available.

While the Retrofit initiative is targeted at all sizes and types of business customers and for almost any energy efficient product or measure, as noted above most applications for this initiative involve lighting replacement projects. The impact of these lighting replacement projects

in terms of contribution to Savings is effectively determined by the size of the customer's building (and the resulting number of lighting fixtures). Versus many other LDCs, Oakville Hydro has relatively few larger building types such as distribution centres, major shopping malls, office towers and major institutional facilities. As such, the market potential for the Retrofit Program is somewhat limited within the service area of Oakville Hydro. The CDM targets for Oakville Hydro did not necessarily take this into account. For 2013, Oakville Hydro's participation rate for the Retrofit Program is slightly higher than the Province-wide average (1.3%); however, the average Savings per project is significantly less.

The DIL initiative participants (small business under 50 kW demand) can receive more energy-efficient lighting and other products at no cost to a maximum of \$1,500. Oakville Hydro experienced strong participation in the previous version of this initiative, the 'Power Savings Blitz', prior to 2011 and as such has experienced lower participation rates in 2011 through 2013 versus the Province-wide average. Oakville Hydro has experienced relatively little customer interest in the other initiatives in the C&I Program portfolio for the reasons noted above.

Throughout 2011 to 2013 the C&I Working Group, comprised of representatives of LDCs and the OPA, has sought to enhance the existing C&I programs and rectify identified program and system deficiencies. This continues to be a challenging undertaking, normally taking months to complete even relatively minor changes due to the current CDM framework. In 2013, the introduction of an expedited change management process helped to fast track small intuitive changes into market and the removal of participant agreements and forms from the schedules have helped some changes through.

Program management by LDCs continues to be delayed by varying interpretations of initiative eligibility requirements, and other administrative variables. The numerous initiative requirements and complex program structures have restricted growth without providing the anticipated improvement in customer participation and verified Savings. In addition, Evaluation, Measurement and Verification ("EM&V") appears not to be transparent. LDCs are held accountable for these results yet are mostly completely removed from the process.

2.2.2.1 Retrofit Incentive (Schedule C-2)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of Retrofit projects completed was 125, or 1.4% of the Province-wide result of 8,785 units

Net Savings

- 694 kW peak incremental peak demand savings and 3,327,076 kWh incremental net energy savings

Contribution to CDM Targets

- 1,842 kW program-to-date net peak demand savings in 2014 excluding an increase to the results reported for 2011 and 2012
- 26,464,218 kWh program-to-date, 2011-2014 cumulative net energy savings excluding an increase to the results reported for 2011 and 2012

Marketing & Promotional Tactics Used:

- Promotion in local newspapers and other publications:
 - The Business Advocate, published six times per year by the Oakville Chamber of Commerce, circulation of approximately 1,500 businesses, full-page ads in five issues
 - Advertised in Chamber of Commerce having a reach of 1,000 impressions
 - Advertised in Business Link with a reach of 300 businesses
 - Advertised in Oakville Beaver reaching over 52,000 households
 - Two bill insert campaigns reaching 16,000 businesses
- Issued two Press Releases
- Hosted held a business luncheon event, recognizing local community businesses who have undertaken significant energy retrofit projects in their facilities, by honouring them with Oakville Saves! recognition certificates.
- Co-hosted five business related events which had a total of 728 attendees (Race to Reduce, Chamber Gala Event, Contractor Channel Partner event with LDCs, Energy Into Action with CLD Group and “Unlock Hidden Savings Event”) with LDCs
- Included in collateral material available for all C&I Program initiatives Promotion on Oakville Hydro’s website throughout 2013, 329 page-views on Oakville Hydro’s Conservation ‘landing page’ for all OPA Programs

Additional Comments:

- The online application process serves the initiative’s objectives for improving documentation in support of projects and verifying the resulting Savings, but is still considered a bit difficult to navigate. Typically, customers or their agents require the assistance of trained LDC personnel to assist in processing their applications, which often times results in contractors electing not to participate in this initiative.
- The requirement for pre-approval of Retrofit projects prior to their commencement can be a barrier, particularly for participants that need to replace equipment that has failed and must be replaced immediately. In the second half of 2013, changes to the ‘prescriptive’ application process for the emergency replacement of HVAC equipment have been implemented to allow for project applications to be completed after-the-fact, and the incentives available have been increased.

- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.
- Despite the challenges described above, Oakville Hydro experienced a 17% increase in the number of new Retrofit project applications submitted in 2013 versus 2012. Lighting replacements or improvements continue to represent the most common type of project.
- It is important to point out that in 2013 the average size of a completed project for customers of Oakville Hydro was 5.6 kW in incremental net peak demand savings and 26.6 MWh in incremental net energy savings. This compares to the Province-wide averages of 6.8 kW and 39.3 MWh, respectively. In each case Oakville Hydro projects were below the provincial average with 18% less in kW and 32% for kWh per project. This adds support to the notion that the potential savings for eligible customers for this initiative within the service area of Oakville Hydro is less than that of the provincial average. Of note, the average size of completed projects for customers of Oakville Hydro has continued to trend lower since 2011.
- Oakville Hydro implemented certain activities in support of this initiative in 2013. On-bill financing for eligible Retrofit projects was introduced in the fall of 2012, however no customers have taken advantage of this offer to date.
- 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.
- Streamlining of the settlements systems resulted in significant improvement in the payment process in 2013.

2.2.2.2 Direct Install Lighting Initiative (DIL) (Schedule C-3)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- Number of DIL projects completed was 16, or 0.1% of the Province-wide result of 17,782 units

Net Savings

- 21 kW peak incremental peak demand savings and 72,801 kWh incremental energy savings

Contribution to CDM Targets

- 302 kW program-to-date net peak demand savings in 2014 and 3,328,878 kWh program-to-date, 2011-2014 cumulative net energy savings excluding an adjustment to the 2011 results

Marketing & Promotional Tactics Used:

- Door-to-door contact by Oakville Hydro's delivery partner throughout the year
- A total of 2,000 direct mail (combined with TOU message)
- Promotion on Oakville Hydro's website throughout 2013, 345 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- As noted earlier, successful execution of the previous version of this initiative, the 'Power Savings Blitz' has resulted in diminished potential for the initiative in Oakville Hydro's service area. This is the primary reason that the number of completed projects was reduced by 86% in 2013 versus 2012.
- LED lighting (for standard light bulbs) was introduced in 2013 as a new measure and has been well received by customers who may not have previously qualified for DIL eligible upgrades. This is an efficient product with a long estimated useful life.

2.2.2.3 Building Commissioning Initiative (Schedule C-6)

Initiative Activities/Progress:

Participation / Activity

- None

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2013, however no data concerning the number of page-views is available, but page-views are expected to be very low

Additional Comments:

- Experience has shown that there is minimal potential for participation in this initiative within the service area of Oakville Hydro as currently offered.

2.2.2.4 New Construction Initiative (HPNC) (Schedule C-4)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- None

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2013, however no data concerning the number of page-views is available, but page-views are expected to be very low

Additional Comments

- There is typically a long project planning and development cycle for new construction projects. As a result Oakville Hydro had no participants in this initiative with completed projects 2011 to 2013, although results are expected in 2014.
- The application process for 'custom' projects requires considerable customer support and skilled LDC staff, and potential participants often express that the effort involved exceeds the value of the incentives available.
- Estimated completion dates for new construction projects tend to be inaccurate and are typically delayed by at least six months. As an outcome of the December 2012 Ministerial Directive, new facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing energy efficient measures.
- This initiative has a very low net-to-gross ratio, which results in almost half of the proposed target savings being 'lost'.

2.2.2.5 Energy Audit Initiative

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- The number of Energy Audits undertaken in Oakville in 2013 was 3, or 0.9% of the provincial total of 319.

Net Savings

- 26 kW peak incremental peak demand savings and 145,352 kWh incremental energy savings

Contribution to CDM Targets

- 26 kW program-to-date net peak demand savings in 2014. This is first contribution from this initiative.
- 290,705 kWh program-to-date 2011-2014 cumulative net energy savings marking the first contribution to target for this initiative.

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2013, 345 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments

- This initiative is an 'enabling' initiative, designed to support subsequent participation in the Retrofit Program or other initiatives within the C&I Program portfolio. While no savings are expected to be attributed to Energy Audits, evaluators recognized savings towards LDCs targets as a result of customers implementing low cost no cost recommendations from their energy audits.
- Participation has been limited to one energy audit per customer which has restricted enabling and direction to the other Initiatives. This has been revised in 2014 and LDCs are now able to consider additional customer participation when presented with a new scope of work.

2.2.2.6 Small Commercial Demand Response Program (Schedule B-3)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity:

- Number of load control devices installed in 2013 was 15, or 1.2% of the Province-wide result.
- Number of IHDs installed was 2, or 0.5% of the Province-wide incremental 2013 result of 378 IHDs installed

Net Savings

- 10 kW peak incremental peak demand savings and 4 kWh incremental energy savings resulting from the installation of load control devices
- No incremental peak demand savings or energy savings are attributed to the installation of IHDs

Contribution to CDM Targets

- 10 kW program-to-date net peak demand savings in 2014 (applies to Scenario 2 only)
- 4 kWh program-to-date, 2011-2014 cumulative net energy savings
- The launch of the commercial version of this initiative is now underway and is expected to deliver greater results in 2014.

Additional Comments:

- Changes to the initiative made in March 2013 to increase the participant-based funding specifically for small commercial customers and to address the expectations of delivery partners for adequate compensation to service this customer segment, are expected to contribute positively to the results achieved.
- Oakville has undertaken its own promotional campaign in 2014 to support this initiative.

2.2.2.7 Demand Response 3 Program (Schedule D-6)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- None

Net Savings

- None

Contribution to CDM Targets

- 83 kW program-to-date net peak demand savings in 2014 (from participants in 2011) (applies to Scenario 2 only)
- 5,505 kWh program-to-date, 2011-2014 cumulative net energy savings (from participants in 2011)

Marketing & Promotional Tactics Used:

- See discussion in Section 2.2.3.5

Additional Comments:

- See discussion in Section 2.2.3.5

2.2.3 INDUSTRIAL PROGRAM

Description: Designed to help identify and promote energy saving opportunities for large building and manufacturing based customers. The Industrial Program portfolio includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

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

Objective: To provide incentives to both existing and new industrial customers to motivate the installation of energy efficient measures and to promote participation in demand management.

Discussion:

The Industrial Program portfolio provides valuable resources to large facilities including funding for enabling Engineering Studies and for process or system changes. The Engineering Studies in particular provide a unique opportunity for customers to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. This Program also provides funding for Energy Managers to provide customers with a skilled individual whose only role is to assist them with conservation initiatives.

This Program is geared to support larger facilities that are prepared to pursue longer term energy efficiency projects that are typically capital-intensive. However, there are relatively few such facilities that are customers of Oakville Hydro. Oakville Hydro has no customers in the 'Large User' category of at least 5 MW in annual peak demand, and has seen declines in its industrial customer base in recent years. Consequently, Oakville Hydro was not able to apply for funding for a Key Account Manager to support the delivery of this Program; and opportunities for significant results arising from the Demand Response 3 initiative (the "DR3 Program") are also limited. Similar to the situation noted for the C&I Program, Oakville Hydro's CDM targets did not necessarily take into account these characteristics of the industrial sector within its service area.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this portfolio. While the expedited change management has benefited the C&I Program portfolio, the Industrial Program portfolio has not seen the same results due to the narrow scope of the process.

2.2.3.1 Process & Systems Upgrades Initiative (PSUI) (Schedule D-1)**Initiative Activities/Progress:**

The following illustrates the progress achieved in 2013:

Participation / Activity

- None

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2013, 345 (OPA link) page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- Customer interest in this initiative is limited by economic factors as well as the lengthy project planning and development cycle. As a result Oakville Hydro had no participants in this initiative in 2011, 2012 or 2013. One small capital project is expected to be completed in 2014.
- The OPA's standard form of contract for this initiative is a lengthy and complicated document, and contains particular clauses, such as the contract term, that many customers are not prepared to accept. As a result, in some instances Oakville Hydro has encouraged customers to consider applying for the Retrofit initiative instead. As noted above, a key to making PSUI successful is a simplified contract for small projects with less onerous conditions for the customer. To partially address this, changes were made in August 2013 to allow smaller projects for industrial process upgrades to be eligible as 'small capital projects'. These changes have not resulted in participation by Oakville Hydro customers.

2.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- None

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2013, 345 (OPA link) page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- This initiative was originally targeted at larger customers with the internal capacity to review electricity usage data. This review requires the customer to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some potential participants in this initiative. The minimum Savings required for this initiative can also present a significant challenge for smaller customers. As such, Oakville Hydro has received no applications for this initiative to date.
- Changes were made to the Retrofit initiative in 2013 to allow smaller facilities to employ M&T systems.

2.2.3.3 Energy Manager Initiative (Schedule D-3)**Initiative Activities/Progress:**

The following illustrates the progress achieved in 2013:

Participation / Activity

- None

Net Savings

- None

Contribution to CDM Targets

- None

Marketing & Promotional Tactics Used:

- Not applicable

Additional Comments:

- Oakville Hydro has not applied for a Roving Energy Manager ("REM") under this initiative due to concerns that there is insufficient market potential to meet the minimum requirement for peak demand savings. Oakville Hydro was not able to apply for funding for a REM to support the delivery of this Program; yet has committed CDM staff to undertake the role and

responsibilities of a REM in order to deliver and manage the initiatives for both the C&I Program portfolios. Funding, like that provided to larger LDCs, would benefit Oakville Hydro toward achieving its targets.

- Oakville Hydro also had no customers that were interested in applying for an Embedded Energy Manager under this initiative in 2011 and 2012. In 2013 one customer applied and was approved for an EEM but did not complete the application process as they were unwilling to agree to certain terms specified in the contract to relinquish their claim to the environmental attributes as required by the OPA.

2.2.3.4 Demand Response 3 (Schedule D-6)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- In 2013, 2 Oakville customers entered into Demand Response contracts. This represents 0.7% of the provincial total of 281.

Net Savings

- 714 kW peak incremental peak demand savings and 16,269 kWh incremental energy savings

Contribution to CDM Targets

- 714 kW program-to-date net peak demand savings in 2014 (applies to Scenario 2 only).
- 17,506 program-to-date, 2011-2014 cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Promoted DR3 along with the C&I initiative portfolio.

Additional Comments:

- Oakville Hydro has few large and medium-size customers with load profiles suitable for this initiative. Aggregators preferentially pursue opportunities with larger customers, putting Oakville Hydro at a competitive disadvantage versus other LDCs.
- In a comparison of Oakville Hydro's results for this initiative in 2011 versus other LDCs similar in size (i.e., total customer accounts), it was observed that these LDCs typically had 10 or more participants (both C&I and Industrial customers) contributing an average of 70 to 800 kW per facility; Oakville Hydro had only two participants in 2013 contributing 60 kW.
- Participant incentives for this initiative were reduced by the OPA effective January 2013. Partially off-setting this change, however, Aggregators are now able to enter into contracts

beyond 2014, allowing them to offer a more competitive contract price over a five year term as opposed to being limited to up to the end of 2014.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2013:

Participation / Activity

- In 2013, 277 Oakville homes participated in this initiative representing 1.0% of the provincial total of 26,756.

Net Savings

- 15 kW peak incremental peak demand savings and 213,751 kWh incremental energy savings Contribution to CDM Targets
- 14 kW program-to-date net peak demand savings in 2014.
- 420,338 kWh program-to-date 2011-2014 cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Held four program awareness events with Social Agencies

Additional Comments:

- Oakville Hydro completed negotiations with its third party delivery agent for the delivery of this Program in late 2012. The 2013 results reflect the success of this effort and additional results are expected for 2014.

2.2.5 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.

3 2013 LDC CDM Results

3.1 Participation and Savings

Oakville Hydro's participation levels and resulting Savings from the OPA Programs, as reported in Final 2013 Verified Results Report published by the OPA, are summarized in Tables 5a and 5b.

Table 5a: Summary of Oakville Hydro's Participation Levels and Savings Achieved as of December 31, 2013

		Oakville Hydro Electricity Distribution Inc. Initiative and Program Level Net Savings by Year (Scenario 1)													
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)	
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	879	598	372		47	33	24		352,333	238,004	159,304		104	2,441,950
Appliance Exchange	Appliances	32	35	54		3	5	11		4,163	8,911	19,950		18	81,544
HVAC Incentives	Equipment	2,179	2,030	2,078		697	414	408		1,241,226	678,390	664,712		1,519	8,329,497
Conservation Instant Coupon Booklet	Items	7,515	452	5,076		17	3	8		276,221	20,458	112,774		28	1,391,806
Bi-Annual Retailer Event	Items	13,931	15,523	13,823		25	22	17		429,984	391,857	251,367		64	3,398,240
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	696	772	4,458		390	355	1,658		1,009	2,674	5,145		0	8,828
Residential Demand Response (IHD)	Devices	0	67	3,472		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
Consumer Program Total						1,179	833	2,126		2,304,937	1,340,294	1,213,251		1,732	15,651,866
Business Program															
Retrofit	Projects	44	107	125		415	755	694		2,093,673	3,837,793	3,327,076		1,842	26,464,218
Direct Install Lighting	Projects	208	112	16		220	89	21		564,846	336,964	72,801		302	3,328,878
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	0	0		0	0	0		0	0	0		0	0
Energy Audit	Audits	0	0	3		0	0	26		0	0	145,352		26	290,705
Small Commercial Demand Response	Devices	0	0	15		0	0	10		0	0	4		0	4
Small Commercial Demand Response (IHD)	Devices	0	0	2		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	1	1	1		82	82	83		3,198	1,194	1,113		0	5,505
Business Program Total						717	926	834		2,661,717	4,175,952	3,546,346		2,171	30,089,310
Industrial Program															
Process & System Upgrades	Projects	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
Energy Manager	Projects	0	0	0		0	0	0		0	0	0		0	0
Retrofit	Projects	5	0	0		60	0	0		336,825	0	0		60	1,347,300
Demand Response 3	Facilities	1	0	2		21	0	714		1,237	0	16,269		0	17,506
Industrial Program Total						81	0	714		338,062	0	16,269		60	1,364,806
Home Assistance Program															
Home Assistance Program	Homes	0	0	277		0	0	15		0	0	213,751		14	420,338
Home Assistance Program Total						0	0	15		0	0	213,751		14	420,338
Aboriginal Program															
Home Assistance Program	Homes	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
Aboriginal Program Total						0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	26	0	0		240	0	0		1,343,088	0	0		240	5,372,354
High Performance New Construction	Projects	2	1	0		22	52	0		114,603	164,845	0		74	952,949
Toronto Comprehensive	Projects	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
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total						262	52	0		1,457,692	164,845	0		314	6,325,303
Other															
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
Other Total						0	0	0		0	0	0		0	0
Adjustments to 2011 Verified Results								0			296,333	0		-12	1,160,199
Adjustments to 2012 Verified Results								44				240,096		44	720,287
Energy Efficiency Total						1,746	1,373	1,224		6,756,963	5,677,222	4,967,087		4,291	53,819,780
Demand Response Total (Scenario 1)						493	438	2,465		5,444	3,869	22,530		0	31,843
Adjustments to Previous Years' Verified Results Total						0	-3	44		0	296,333	240,096		32	1,880,486
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						2,239	1,808	3,733		6,762,407	5,977,423	5,229,713		4,323	55,732,109
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).													The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.		
*Includes adjustments after Final Reports were issued													Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated		
													Full OEB Target:		
													20,700		
													74,060,000		
													20.9%		
													75.3%		

Table 5b: Summarized Program Results

Program	2013 Gross Savings		2013 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	2,582	2,102,965	2,126	1,213,251	1,732	15,651,866
Business Program Total	1,103	4,781,741	834	3,546,346	2,171	30,089,310
Industrial Program Total	714	16,269	714	16,269	60	1,364,806
Home Assistance Program Total	15	213,751	15	213,751	14	420,338
Pre-2011 Programs completed in 2011 Total	0	0	0	0	314	6,325,303
Other Adjustments	67	332,701	44	240,096	32	1,880,486
Total OPA Contracted Province-Wide CDM Programs	4,481	7,447,429	3,733	5,229,713	4,323	55,732,109

3.2 Evaluation: 2013 KEY EVALUATION FINDINGS

Appliance Retirement Initiative

- Per unit savings increased for both energy (+15.4%) and demand (+4.0%) between 2012 and 2013 due to a greater proportion of refrigerators/freezers with large volumes and a manufacturer date before National Appliance Energy Conservation Act (NAECA) was implemented. Dehumidifiers also show a higher per unit savings related to the change in ENERGY STAR definitions.
- Overall participation continues to decline with 20,952 appliances recycled in 2013, compared with 34,146 in 2012 and 56,110 in 2011. The program has experienced close to a 40% reduction (39.1% 2011 to 2012, 41.1% 2012 to 2013) in recycled appliances in each subsequent year of operation.
- Net to gross ratio stayed constant at around 43% between 2012 and 2013

Appliance Exchange Initiative

- Increased per unit energy and demand savings due to an adjustment to the assumed consumption of "conventional" and Energy Star dehumidifiers. The calculated weighted average annual energy savings of a exchanged dehumidifier increased 36.6%
 - Of the participants surveyed who reported they had replaced the dehumidifiers they exchanged, 100% reported purchasing ENERGY STAR® models.
 - 21% increase in the number of eligible dehumidifiers collected in the program. In 2013, 5,337 dehumidifier units were collected compared to 3,617 dehumidifier units and 219 window air conditioners.
 - Net to Gross ratio (NTG) was 52.6% which is a slight increase of the 2012 NTG of 51.5%

Heating and Cooling Initiative

- Total participation (equipment) increased 7.5% from 2012 to 91,581.
- Per unit furnace savings decreased from 1139 kWh/yr in 2012 to 1090 kWh/yr due to a slight shift in the number of participants who use their furnace fan non-continuously both before and after the retrofit as opposed to changing from continuous to non-continuous operation
- Per unit energy and demand savings assumptions for central air conditioners did not change from 2012.

Annual Coupons

- Customers redeemed more than ten times as many annual coupons in 2013 as in 2012 because of new LED coupons and full year availability of all coupons. Customers redeemed 13% more annual coupons in 2013 than in 2011, the first full year of annual coupons due to the high volume of new LED coupons.
- There was a significant reduction in savings specialty CFL related measures. In 2013, the findings showed around 30% of participants are replacing incandescent bulbs compared to 60% of participants replacing incandescent bulbs in 2012.
- Despite the significant per unit savings reductions, the Net Annual Savings from Annual Coupons in 2013 was more than 5.5 times that in 2012. This is primarily because of higher participation due to the inclusion of LED coupons and full year availability of all coupons.
- 93% of coupons redeemed in 2013 were for general purpose LEDs and specialty CFLs and LEDs, producing 89% of net annual energy savings and 84% of net demand savings.
- Measure NTG ratio was approximately 8% higher in 2013 than in 2012 due to the inclusion of participant like spillover, i.e., purchase of additional coupon initiative measures without using coupons because of program influence.

Bi-Annual Coupon Events

- 19% increase in the number of coupons redeemed during the Spring and Fall Events in 2013 compared to 2012 because of substantial increase in LED purchases with event coupons.
- 36% lower net annual savings in 2013 compared to 2012 primarily because of significant reductions in per unit savings estimates for standard and specialty CFLs. In 2013, findings showed a decrease in replacement rate of incandescent bulbs. Only 30% of 2013 participants are estimated to have replaced incandescent bulbs compared to 60% of participants replacing incandescent bulbs in 2012. This leads to a change in the baseline assumption for the savings calculations.
- 87% of coupons redeemed were for general purpose and specialty CFLs and LEDs, producing 80% of net annual energy savings and 73% of net demand savings
- Measure NTG ratio was approximately 8% higher in 2013 than in 2012 due to the inclusion of participant like spillover, i.e., purchase of additional coupon initiative measures without using coupons because of program influence.

Peaksaver PLUS

- The cycling strategy for CAC load control was changed from 50% simple cycling to 60% simple cycling.
- Under 1-in-10 year weather conditions, the 2013 estimated impacts for load control devices are higher than the 2012 estimates in all months and are between 10 and 15% higher during the core summer months of June through August.
- Load impact estimates for the average small and medium business and for electric water heaters among residential customers are also unchanged from the prior year's analysis
- This year's IHD analysis has yielded an estimate of no statistically significant energy savings.

Residential New Construction

- Energy and demand savings for the Initiative increased by 300% compared to the combined 2011 and 2012 results ; number of projects also increased from 45 in 2011 and 2012 to 86 in 2013.
- All projects are opting for the prescriptive or performance path. No custom project applications were received in 2013, similar to 2011-2012 .
- Net-to-gross ratio for the initiative was higher by 14% from 49% in 2012 to 63% in 2013.

HOME ASSISTANCE PROGRAM

Home Assistance Program

- Participation increased significantly to 26,756 participants in 2013 from 5,033 in 2012
- Realization rates were slightly lower in 2013 (0.88 for kWh and 0.26 for kW) than in 2012 (0.98 for kWh and 0.32 for kW) primarily due to updated verified per unit assumptions .
- Realization rate for demand savings remained low as FAST Tool calculated kW savings for certain insulation measures remained very high and recommended revisions to kW savings factors were not yet in use in 2013 (changes to the FAST Tool to address these issues were made in early 2014)

BUSINESS PROGRAM

Retrofit

- A total of 8,785 projects completed in 2013. Reported energy savings for individual projects ranged from 1 kWh to over 5,000,000 kWh
- Net to Gross ratio (NTG) for energy was 72.8%, consistent with prior years
- NTG for demand was 72.0%, consistent with prior years
- NTG ratios are comparable to similar programs across North America

Small Business Lighting

- In 2013 the initiative introduced: a) an increase in the incentive to \$1500 from \$1000, b) new LED measures c) Agribusiness eligibility, resulting in the stabilization of participation and an increase in savings.
- 17,782 projects completed in 2013 (3.8% decrease from 2012)
- However, 12.2% increase in Net Verified Energy Savings relative to 2012.
- The average incentive per project and savings per project both increased between 2012 to 2013
- Net to Gross ratio (NTG) for 2013 remained unchanged at 94%

Audit Funding

- 319 audits were completed in 2013
- 2013 sample saw more recommended measures implemented without incentives (33% in 2013 vs. 13% in 2012)
- The average per audit summer peak demands savings is estimated to be 13 kW.

Building Commissioning

- 29 unique participants in the 2013 population
- No Commissioning projects completed the hand-off/completion phase in 2013
- Improvements to the chilled water system controls were the most commonly targeted measure.
- Large variation in estimated savings results between preliminary investigation phase and actual implementation phase

New Construction

- Number of projects increased by 25% from 69 in 2012 to 86 in 2013.
- Custom projects, representing only about 8% of the total number of projects, account for 67% of verified demand savings and 54% of verified energy savings.
- A realization rate of 72% for energy savings is low due to the low realization rate of the Agribusiness high ventilation, low speed fans which comprised of 15 % of the HPNC prescriptive project energy savings.
- Net-to-gross ratio for the initiative was higher by 5% from 49% in 2012 to 54% in 2013.

INDUSTRIAL PROGRAM

Process and Systems Upgrade Initiative

- In 2013, three PSUI projects were put into service. Projects were very well documented and technical reviews were thorough. Most projects are delivering the level of energy savings expected or more (realization rates of 87% for energy savings and 86% for summer demand savings)
- Good level of quality on M&V conducted in each project. The level of free-ridership was found to be very low, at only 7% for energy savings and 6% for demand savings, and no spillover was identified.
- Energy Managers are seen as important drivers of program enabled savings projects. Almost a 300% increase vs. 2012 in the amount of energy savings from program enabled savings projects.

DR-3

- The largest 20 contributors account for 60% of the contractual demand reduction – in other words, less than 5% of contributors account for the majority of the load reductions.
- In 2013, DR-3 was successfully dispatched locally for the first time in order to provide assistance in restoring power after a prolonged power outage due to substation flooding.

Note:

The Key Evaluation findings are derived from the 2013 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 2014.

3.3 Spending

Table 3 and 4 summarize the total spending by initiative that Oakville Hydro has incurred in 2013 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 6: 2013 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	\$27,406				\$27,406
Appliance Exchange	\$7,959				\$7,959
HVAC Incentives	\$27,417				\$27,417
Annual Coupons					
Bi-Annual Retailer Event	\$12,854				\$12,854
Retailer Co-op					
Residential Demand Response	\$503,418	\$1,191,285			\$1,694,703
New Construction Program	\$12,482				\$12,482
Business Program					
Equipment Replacement	\$295,273		\$942,275		\$1,237,549
Direct Installed Lighting	\$41,643	\$6,325	\$36,492		\$84,460
Existing Building Commissioning Incentive	\$18,859				\$18,859
New Construction and Major Renovation Initiative	\$26,319				\$26,319
Energy Audit	\$52,849				\$52,849
Small Commercial Demand Response					
Demand Response 3					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	\$14,737				\$14,737
b) detailed engineering study	\$14,507				\$14,507
c) program incentive	\$12,883				\$12,883
Monitoring & Targeting	\$13,374				\$13,374
Energy Manager					
Key Account Manager ("KAM")					
Equipment Replacement					
Demand Response 3	\$21,726				\$21,726
Home Assistance Program					
Home Assistance Program	\$29,989	\$20,798			\$50,787
TOTAL SPENDING	\$1,133,696	\$1,218,408	\$978,767		\$3,330,870

Table 7: Cumulative Spending (2011-2014)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	\$111,504				\$111,504
Appliance Exchange	\$38,361				\$38,361
HVAC Incentives	\$95,000				\$95,000
Annual Coupons	\$32,999				\$32,999
Bi-Annual Retailer Event	\$63,380				\$63,380
Retailer Co-op					
Residential Demand Response	\$650,176	\$1,472,805	\$16,900		\$2,139,881
New Construction Program	\$35,000				\$35,000
Business Program					
Equipment Replacement	\$568,978		\$1,762,324		\$2,331,302
Direct Installed Lighting	\$132,810	\$93,500	\$379,462		\$605,772
Existing Building Commissioning Incentive	\$64,293				\$64,293
New Construction and Major Renovation Initiative	\$83,151				\$83,151
Energy Audit	\$135,768				\$135,768
Small Commercial Demand Response					
Demand Response					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	\$36,599				\$36,599
b) detailed engineering study	\$35,853				\$35,853
c) program incentive	\$26,213				\$26,213
Monitoring & Targeting	\$24,755				\$24,755
Energy Manager					
Key Account Manager ("KAM")					
Equipment Replacement Incentive					
Demand Response 3	\$41,912				\$41,912
Home Assistance Program					
Home Assistance Program	\$94,997	\$20,798			\$115,795
Pre 2011 Programs					
Electricity Retrofit Incentive Program	\$18,236		\$47,210		\$65,446
High Performance New Construction					
TOTAL SPENDING	\$2,289,985	\$1,587,103	\$2,205,896		\$6,082,984

As of December 31, 2013, the Program Administration Budget (“PAB”) funding spending of \$2.29 million was approximately 64% of the total PAB funding allocation of \$3.58M for Oakville Hydro. In April 2014 the OPA agreed to provide OH an additional \$0.7M in PAB funding raising the total allocation to \$4.28M. The projected spending to the end of 2014 is anticipated to be \$3.64M.

3.4 Additional Comments

As indicated for specific OPA Program initiatives in Section 1.2, Oakville Hydro may be at a disadvantage with respect to the achievement of its CDM targets versus other LDCs for a number of reasons. These include:

- Oakville Hydro does not have customers in the Large User class, meaning that there is limited potential for key Industrial Program initiatives.
- The average Savings from Retrofit projects for customers of Oakville Hydro is substantially lower than the Province-wide average.
- Oakville Hydro had very strong participation in the Power Savings Blitz Program prior to 2011, and as such has lower participation in the Direct Install Lighting initiative than other LDCs.

Other challenges faced by Oakville Hydro with respect to its CDM targets are common to all LDCs. Examples include:

- A reduction of Province-wide advertising campaigns from the OPA for the Consumer Program portfolio.
- The impact of downward revisions to the net-to-gross ratios, realization rates and attributed Savings per measure, particularly for RDR.
- Processes, complexities and operational concerns.
- The time required to assess, approve and implement even minor changes to improve the existing OPA Programs.

While the OPA did not include specific LDC rankings in its Final 2013 Verified Results Report, data was provided in graph form indicating that 58 LDCs have achieved less than 50% of their target for net peak demand reduction as of the end of 2013. With respect to cumulative net energy savings, at 75.3% of its target Oakville Hydro is close to the Province-wide average for all LDCs.

4 Combined CDM Reporting Elements

4.1 Progress Towards CDM Targets

Table 8: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by OPA	2.2	1.7	1.7	1.7
2012 – Verified by OPA	0.0	1.8	1.4	1.3
2013 – Verified by OPA	0.0	0.0	3.7	1.3
2014				
Verified Net Annual Peak Demand Savings in 2014:				4.3
Oakville Hydro Electricity Distribution Inc. 2014 Annual CDM Capacity Target:				20.7
Verified Portion of Peak Demand Savings Target Achieved (%):				20.9%

Table 9: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	6.8	6.8	6.8	6.7	26.9
2012 – Verified by OPA	0.3	6.0	6.0	5.9	18.1
2013 – Verified by OPA	0.0	0.2	5.2	5.2	10.7
2014					
Verified Net Cumulative Energy Savings 2011-2014:					55.7
Oakville Hydro Electricity Distribution Inc. 2011-2014 Cumulative CDM Energy Target:					74.1
Verified Portion of Cumulative Energy Target Achieved (%):					75.3%

As will be discussed in the following sections, Oakville Hydro's progress-to-date to its CDM targets will be impacted by the OPA's settlement of attributable Savings for key initiatives. Oakville Hydro's achievement of its targets is therefore stated as a range whereby it will achieve between 41-80% of the net peak demand reduction target and 72-115% of the cumulative net energy savings reduction target.

4.2 Variance from Strategy

Oakville Hydro's performance-to-date and forecast performance to the Annual Milestones and CDM targets, set out in its CDM Strategy, is shown in Table 10:

Table 10: Performance of Oakville Hydro to Annual Milestones (Scenario 2)

Program	Net Peak Demand Savings (MW)				Cumulative Net Energy Savings (GWh)			
	2011 Verified ⁶	2012 Verified ⁷	2013 Verified	2014 Forecast	2011 Verified	2012 Verified	2013 Verified ⁸	2014 Forecast
Residential	1.0	1.5	3.3	4.4 – 7.3	8.5	12.6	15.0	15.9 – 24.9
Commercial and Institutional / pre-2011	1.1	1.9	2.7	3.0 – 4.1	17.9	31.8	39.0	35.1 – 48.9
Industrial	0.1	0.1	0.8	1.0 – 2.8	1.3	1.3	1.4	1.4 – 10.6
Low Income	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6
Total OPA Programs	2.1	3.5	6.8	8.4 – 14.2	27.8	45.8	55.7	53 – 85
Board-Approved Programs (TOU pricing only)	0.0	0.0	0.0	0 - 2.3	0.0	0.0	0.0	0.0
Total	2.1	3.5	6.8	8.4 – 16.5	27.8	45.8	55.7	53 – 84.9
Milestones from CDM Strategy ⁹	5.3	10.5	15.8	20.7	7.5	22.5	45	74.1

⁶ Includes adjustments made by the OPA to 2011 results.

⁷ Includes adjustments made by the OPA to 2012 results.

⁸ Milestones have been restated from the CDM Strategy. Net peak demand savings Milestones are now reported to only one significant figure. Net energy savings Milestones are now reported on a cumulative basis.

As indicated in Table 10, Oakville Hydro has exceeded the 2013 Milestone for cumulative net energy savings of 45.0 GWh by 24%, but has achieved only 43% of the Milestone for net peak demand savings. For 2014, the forecast is uncertain. The key factors for the negative variance for net peak demand savings and cumulative energy savings may be summarized as follows:

For the Consumer Program:

- Significantly lower kW contribution for RDR devices compared to the provincial average,
- Lower-than-anticipated or stagnant participation rates in the Appliance Retirement, HVAC Incentives and Conservation Instant Coupon Booklet initiatives,
- Downward adjustments to the net-to-gross ratios for a number of Consumer Program initiatives,
- That a number of initiatives within the Consumer Program portfolio were never launched by the OPA,
- TOU contribution.

For the C&I Programs:

- Lower-than-anticipated results for the Retrofit Program, where the average project size for participating customers of Oakville Hydro is significantly less than the Province-wide average for both kW and kWh,
- Lower results for the DIL initiative, impacted by Oakville Hydro's success with the prior Power Savings Blitz Program,
- The delay in the introduction of the Direct Service Space Cooling initiative by the OPA, as well as the lack of customer interest in and eventual cancellation of the DR1 initiative.
- Lower than anticipated participation levels in the Industrial Program initiatives, reflecting the more limited market potential for this Program within the service area of Oakville Hydro versus other areas of the Province; and,
- The absence of any Board-Approved CDM Programs.

4.3 Outlook to 2014 and Strategy Modifications

As indicated in Table 10, Oakville Hydro's 2014 forecast of performance toward its CDM targets is presented as a range of likely achievements. Key factors impacting their net Demand forecast (Scenario 2) are specific to not yet released TOU results, Residential Demand Response contribution values (as compared to Provincial values) and continued lower Savings contribution for Retrofit projects. Depending on these outcomes, Oakville Hydro has the potential to achieve 16.5 MW in net peak demand reduction, or 80% of its target of 20.70 MW. Alternatively, Oakville Hydro may only be able to achieve 8.4 MW, or 41%. For cumulative net energy savings the range is as significant and is of concern. Oakville Hydro's current forecast is to achieve between 53 and 85 GWh in cumulative net energy savings reduction, or 72 to 115% of its target of 74.06 GWh.

The most significant reasons for these variances include:

For the Consumer Program:

- For all initiatives, the original forecast assumed an increase in participation levels throughout the planning period; and further that all initiatives originally envisioned for this Program would be available. As has been noted earlier, for many key initiatives participation levels have declined or have stagnated. The greatest impact from these factors with respect to contributions to Savings is for the Appliance Retirement, HVAC Incentives and Bi-Annual Retailer Event initiatives,
- Downward adjustment to the net demand savings attributable to RDR control devices for Oakville Hydro compared to the Provincial average,
- Downward adjustments to the net-to-gross ratios for a number of Consumer Program initiatives, as well as to the attributed demand savings for programmable thermostats installed under the RDR initiative,
- No TOU results from the OPA that may or may not be verified by the end of 2014, and
- There was inconclusive evaluation of energy savings for IHDs installed in the RDR initiative. In previous Preliminary Results Reports issued by the OPA, the (unverified) Province-wide results indicated that each IHD installed would contribute over 200 kWh in incremental energy savings. Oakville Hydro currently expects to install more than 6,000 IHDs by the end of 2014; as such, the impact of attributing no energy savings to this measure is significant. Should the OPA subsequently determine that energy savings can be attributed to IHDs, the forecast results for the RDR initiative may be increased.

For the C&I Program:

- Market saturation prior to 2011 through Power Savings Blitz resulting in poor participation levels for the DIL initiative,
- Continuing results for the Retrofit Program where the average project size and overall contribution to Savings for participating customers of Oakville Hydro is significantly below the Province-wide average.
- Continuing limited potential for the Industrial Program portfolio within Oakville Hydro's service area.

A summary of the estimated impact of the above-noted factors on the forecasted achievement to Oakville Hydro's CDM targets, which are outside the control of Oakville Hydro, is shown in Table 11:

Table 11: Summary of Estimated Impact of Key Factors on Oakville Hydro's Performance to its CDM Targets (Scenario 2)

	Total Estimated Impact on Net Peak Demand Savings (MW)	Total Estimated Impact on Cumulative Net Energy Savings (GWh)
Variations identified for Consumer Program initiatives	2.9	9
Variations identified for C&I Program initiatives	1.1	13.8
Variations identified for Industrial Program initiatives	1.8	9.2
Total	5.8	13.8
Current Forecast for Performance to CDM Targets	8.4 – 14.2	52.4 – 84.4
Estimated Results Without Impact of Key Factors	14.2	84.4
CDM Targets	20.70	74.06

Does not include possible TOU results

As shown in Table 11, without the impact of these factors Oakville Hydro could achieve 80% of the target for net peak demand savings; and could exceed the target for cumulative net energy savings by up to 15 % or 84.4 GWh of its target

Irrespective of the forecast, Oakville Hydro continues to strive for improved participation in the OPA Programs. Through its collaborative efforts with other LDCs, Oakville Hydro will continue to review its processes and procedures for implementation of the OPA Programs; providing

feedback to the OPA on potential enhancements, and seeking to adopt successful practices from other LDCs. Oakville Hydro will also continue to refine its marketing and promotional activities to reinforce existing consumer awareness levels and provide compelling reasons for customers to participate in the OPA Programs and otherwise adopt energy-conserving behaviours.

With respect to Board-Approved CDM Programs, as noted previously Oakville Hydro has not applied for any such Programs. Hydro One Networks Inc. and Hydro One Brampton Networks Inc. (jointly) as well as Toronto Hydro-Electric System Limited each made applications to the OEB for Board-Approved CDM Programs, (Board File No. EB-2010-0331/0332 and EB-2010-0011) but were not successful in having them approved as filed. Among the reasons for this outcome was the requirement that Board-Approved CDM Programs be non-duplicative of the OPA Programs. Primarily because of this limitation, Oakville Hydro did not apply for any Board-Approved CDM Programs during 2011, 2012 or 2013. Oakville Hydro acknowledges that PowerStream Inc. has been successful in its application for a Board-Approved CDM Program in 2013.

At this point, however, the likelihood of any new Board-Approved CDM Programs having a measurable impact on Oakville Hydro's performance to its CDM targets is very low. The process to design and receive approval for any such Programs would take many months, and similarly the length of time to launch any such Programs into the market would also be lengthy.

5 Conclusion

Program-to-date, Oakville Hydro has achieved 6.7 MW in net peak demand savings and 55.6 GWh in cumulative net energy savings, which represents 33% and 75% of Oakville Hydro's 2014 CDM targets, respectively. These results are representative of a considerable effort expended by Oakville Hydro, in cooperation with other LDCs, customers, supply channel partners and stakeholders, to overcome many operational and structural issues that have limited the effectiveness of some of the OPA Program initiatives across all market sectors. This achievement is a success and the relationships built with customers and supply channel partners within the 2011-2014 CDM program term will generate results in subsequent years.

The current forecast to the end of 2014 is that Oakville Hydro will achieve approximately between 41 to 80% of its net peak demand reduction target and 72 to 115% of its cumulative net energy savings reduction target. Existing strength seen in Oakville Hydro's delivery of the Consumer Program portfolio is expected to continue such that participation levels are expected to continue to be at or above the Province-wide results. Efforts will also continue to achieve the maximum CDM potential for the C&I and Industrial Program portfolios within Oakville Hydro's service area.

However, results from the OPA Final 2013 Verified Results Report, specifically for the RDR initiative and Time-of-Use Rates are of a concern. A reduction of 32% of the attributable net peak demand savings from the Provincial average represents a significant loss of target for Oakville Hydro. Demand savings attributable to Time-of-Use rates have not yet been released and there is concern that the results, and their impact toward targets, will be lower than first forecast.

Oakville Hydro is committed to ensuring that existing and future CDM programs are a cost-effective resource in addressing the long-term energy requirements of our customers, and for households and businesses throughout Ontario. We look forward to working with the OPA, the Ministry of Energy, the OEB and other agencies supporting the energy sector in Ontario, other LDCs, customers, and other stakeholders to develop and implement the new Conservation First framework for CDM activities.

Appendix A: Initiative Descriptions

CONSUMER PROGRAM

Appliance Retirement Initiative (Schedule B-1, 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: The OPA centrally contracts for the Province-wide marketing, call centre, appliance pick-up and decommissioning process. LDCs provide local marketing and coordination with municipal pick-up where available.

Additional detail is available:

- Schedule B-1, Exhibit D:
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electri_city_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

Appliance Exchange Initiative (Schedule B-1, Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and fall

Objective: Remove and permanently decommission older, inefficient window air conditioners and portable dehumidifiers that are in Ontario.

Description: This initiative involves appliance exchange events held at local retail locations, where customers are encouraged to bring in their old room air conditioners and dehumidifiers in exchange for coupons / discounts towards the purchase of new energy efficient equipment.

Targeted End Uses: Window air conditioners and portable dehumidifiers

Delivery: The OPA contracts with participating Retailers for collection of eligible units. LDCs provide local marketing.

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electrity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer/Programs/EXCHANGE-EVENT.aspx>

HVAC Incentives Initiative (Schedule B-1, Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: Encourage the replacement of existing heating systems with high efficiency furnaces equipped with ECMs, 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 ECMs) and ENERGY STAR qualified central air conditioners by approved Heating, Refrigeration, and Air Conditioning Institute of Canada (“HRAI”)-qualified contractors.

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

- Schedule B-1, Exhibit B
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electrity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer.aspx>

Conservation Instant Coupon Booklet Initiative (Schedule B-1, Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: 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 products 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 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 OPA 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 OPA enters into agreements with Retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A:
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer.aspx>

Bi-Annual Retailer Event Initiative (Schedule B-1, Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

Objective: 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 products.

Targeted End Uses: As per the Conservation Instant Coupon Booklet Initiative

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

Additional detail is available:

- Schedule B-1, Exhibit C:
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer.aspx>

Retailer Co-op Initiative

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

Objective: Encourage customers to purchase energy efficient products (and go above-and-beyond the traditional Bi-Annual Retailer Events).

Description: This 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 efficient products.

Targeted End Uses: As per the Conservation Instant Coupon Booklet initiative

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

Residential New Construction Initiative (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: Provide incentives to participants for the purpose of promoting the construction of energy efficient residential homes.

Description: This initiative 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 energy efficient products or 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 CACs, lighting control products, lighting fixtures, EnerGuide 83 and 85 whole homes

Delivery: Local engagement of builders is the responsibility of the LDC and is to be supported by OPA advertising driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C:
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricty_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer.aspx>

Residential Demand Response Program (Schedule B-3)

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

Initiative Frequency: Year round

Objective: 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: Participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and real-time consumption information through an IHD.

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

Delivery: LDCs recruit customers, procure technology and arrange for installation

Additional detail is available:

- Schedule B-1, Exhibit C:
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricty_contracts/pdfs/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf and
- saveONenergy website: <https://saveonenergy.ca/Consumer.aspx>

COMMERCIAL AND INSTITUTIONAL PROGRAM

Efficiency: Equipment Replacement Incentive Initiative (Schedule C-2)

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

Initiative Frequency: Year round

Objective: 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: This initiative 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: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf and
- saveONenergy website: <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

Direct Install Lighting Initiative (Schedule C-3)

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

Initiative Frequency: Year round

Objective: Offer a free installation of eligible lighting and water heating measures of up to \$1,000 (increased to \$1,500 as of December 2012) 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: This 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 delivery agent.

Additional detail is available:

- Schedule C-3:
<http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf> and
- saveONenergy website: <https://saveonenergy.ca/Business.aspx>

Existing Building Commissioning Incentive Initiative (Schedule C-6)

Target Customer Type(s): Commercial and Institutional Customers

Initiative Frequency: Year round

Objective: 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:
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf and
- saveONenergy website: <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

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

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

Initiative Frequency: Year round

Objective: 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: This 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:

<http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewConstructionInitiativeV2.pdf>

saveONenergy website: <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

Energy Audit Initiative (Schedule C-1)

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

Initiative Frequency: Year round

Objective: 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:

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf

- save**ON**energy website: <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

INDUSTRIAL PROGRAM

Process and Systems Upgrades Initiatives (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 components: (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 costs
- c) A one-year pay back

Targeted End Uses: Process and systems

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

Additional detail is available:

- Schedule D-1:

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-1%20Process%20and%20Systems%20Upgrades%20Initiative.pdf

- saveONenergy website: <https://saveonenergy.ca/Business.aspx>

Monitoring and Targeting Initiative (Schedule D-2)

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

Initiative Frequency: Year round

Objective: Offers access to funding for the installation of monitoring and targeting systems in order to deliver a minimum savings target at the end of 24 months and sustained for the term of the participant agreement.

Description: This initiative offers customers funding for the installation of a monitoring and targeting 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:
-

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf and

- saveONenergy website: <https://saveonenergy.ca/Business.aspx>

Energy Manager Initiative (Schedule D-3)

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

Initiative Frequency: Year round

Objective: 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 annual 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:
- http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electrify_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf
- saveONenergy website: <https://saveonenergy.ca/Business.aspx>

Key Account Manager Initiative (Schedule D-4)

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

Initiative Frequency: Year round

Objective: Offers LDCs the opportunity to access funding for the employment of a Key Account Manager ("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. KAMs are 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:

- Schedule D-4:

- http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/projects_programs/pdfs/PSUI%20Initiative%20Schedule%20D-4.Key%20Account%20Manager.20110322.pdf

Demand Response 3 Program (Schedule D-6)

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

Initiative Frequency: Year round

Objective: 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: This initiative 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 initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. The DR3 Program 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: The initiative is delivered by Demand Response Providers (“DRPs”), under contract to the OPA. The OPA administers contracts with all DRPs and direct participants (who provide in excess of 5 MW of demand response capacity). DRPs provide 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:
- http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf and
- saveONenergy website: <https://saveonenergy.ca/Business.aspx>

LOW INCOME PROGRAM (Schedule E-1)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

Objective: 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 Program for income-qualified customers. It offers residents the opportunity to take advantage of free installation of energy efficient products or 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 Program is designed to coordinate efforts with gas utilities.

Targeted End Uses: End use products or measures based on results of the audit (e.g., CFLs, etc.)

Delivery: LDC delivered.

Additional detail is available:

- Schedule E:
<http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf>

Appendix B: Pre-2011 Programs

Electricity Retrofit Incentive Program (ERIP)

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

Initiative Frequency: Year Round

Objective: Provide 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: 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 Savings associated with these projects are attributed to 2011.

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

Delivery: LDC Delivered

High Performance New Construction (HPNC) Program

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

Initiative Frequency: Year round

Objective: Provide incentives for new buildings to exceed existing codes and standards for energy efficiency. The HPNC Program uses both a prescriptive and custom approach and was delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010.

Description: The HPNC Program offered financial incentives to 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. The Savings associated with these projects are attributed to the year in which they were completed.

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

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

Appendix C: 2013 EVENTS SCHEDULE

Date of Event	Event Name
January-01-13	Polar Bear Dip
May-25-13	Oakville Conserves Energy Fair
April-06-13	Halton Eco-Fest
April-06-13	Canadian Tire
April-13-13	The Home Depot
April 12-14, 2013	The Oakville Lifestyle Home Show
June-01-13	Halton Region Rain Barrel Sale
June-09-13	Mayor's Picnic
June 15, 16, 2013	Canadian Tire
June-15-13	Ice Cream Social (Councillors)
June 21- 23, 2013	Second annual Rotary Oakville Ribfest
July-01-13	Oakville Canada Day
July-06-13	4th Annual Environmental Awareness Day
August 2-4, 2013	Oakville Waterfront Festival
Sept 6-8, 2013	Oakville Lifestyle Fall Home Show
Sept. 21, 2013	Fire Prevention Week
Sept 14- 15, 2013	Canadian Tire Exchange event
September-15-13	Terry Fox Run
Sept. 28- 29, 2013	Canadian Tire
Oct 5- 6, 2013	The Home Depot
Oct. 12, 2013	Canadian Tire
Oct. 19- 20, 2013	The Home Depot