



September 30, 2013

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
27th Floor/ P.O. Box 2319
2300 Yonge St.
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Halton Hills Hydro Inc. 2012 Annual Report - Conservation and Demand Management
Board File EB-2010-0215**

As per Section 2.2 of the Ontario Energy Board's Conservation and Demand Management ("CDM") Code for Electricity Distributors, issued September 16, 2010, Halton Hills Hydro Inc. has enclosed its 2011 CDM Annual Report.

An electronic copy of the 2012 CDM Annual Report has been filed through RESS on the Ontario Energy Board website and two (2) hardcopies delivered to the Board offices.

Any questions or concerns can be directed to Tracy Rehberg-Rawlingson, Regulatory Affairs Officer, (519) 853-3700 extension 257 or tracyr@haltonhillshydro.com.

Yours truly,

(Original Signed)

Tracy Rehberg-Rawlingson
Regulatory Affairs Officer
Halton Hills Hydro Inc.

Cc: Mr. Arthur A. Skidmore, President & CEO, HHHI
Mr. David J. Smelsky, CFO, HHHI
Ms. Linda Boyer, CDM Officer, HHHI

Halton Hills Hydro Inc.

Conservation and Demand Management 2012 Annual Report

**Submitted to:
Ontario Energy Board**

Submitted on September 30, 2013

Halton Hills Hydro Inc. 2012 CDM Annual Report

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Executive Summary

This annual report is submitted by Halton Hills Hydro Inc. in accordance with the filing requirements set out in the CDM Code (Board File No. EB-2010-0215), specifically Appendix C, Annual Report Template, as a progress and strategy report. Accordingly, this report outlines Halton Hills Hydro Inc. CDM activities for the period of January 1, 2012 to December 31, 2012. It includes net peak demand and net energy savings achieved from 2011 and 2012, discussion of the current and future CDM framework, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

Halton Hills Hydro Inc. did not apply for any Board-Approved CDM Programs during 2012; however, as noted in the CDM guidelines, released April 26, 2012, the Ontario Energy Board (OEB) has deemed Time-of-Use (TOU) pricing a Province-wide Board-Approved CDM Program. The Ontario Power Authority (OPA) is to provide measurement and verification on TOU. At the time of this report the OPA has not released any verified results of TOU savings to Halton Hills Hydro Inc.

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

In 2012, Halton Hills Hydro Inc. delivered the entire portfolio of OPA-Contracted Province-Wide CDM Programs to all of its customer segments. An active and aggressive approach was undertaken whereby a sales and technical team made best efforts to meet with every commercial, institutional and industrial customer in the Town of Halton Hills and offer services to help customers identify energy management opportunities, estimate the resultant cost savings and CDM program incentives and to procure any required equipment and installation services. In cases where third-party agencies are able to deliver CDM programs more effectively due to prior experience or pre-developed processes, delivery contracts were entered into. Consumer Programs were delivered through targeted and mass marketing techniques developed closely with the technology delivery partners.

To date Halton Hills Hydro Inc. has achieved 1.0 MW (based on DR-3 Scenario 1) of net incremental peak demand savings and 2.1 GWh of net incremental energy savings in 2012. A summary of the achievements towards the CDM targets is shown below:

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

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	1.0	0.4	0.4	0.4
2012 - Verified		1.0	0.3	0.3
2013				
2014				
Verified Net Annual Peak Demand Savings Persisting in 2014:				0.8
Halton Hills Hydro Inc. 2014 Annual CDM Capacity Target				6.2
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				12.2%

Net Energy Savings at the End User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	1.9	1.9	1.9	1.8	7.5
2012 - Verified		2.1	2.1	2.1	6.3
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					13.7
Halton Hills Hydro Inc. 2011-2014 Annual CDM Energy Target					22.5
Verified Portion of Cumulative Energy Target Achieved (%):					61.0%

The updated forecast prepared for this report shows that there will be a shortfall of approximately 0.996 MW versus Halton Hills Hydro Inc.'s 2014 peak demand reduction target. Although, the peak demand savings are below target, Halton Hills Hydro Inc. expects to substantially achieve the electricity energy savings 2014 target. Given the expected peak demand shortfall, Halton Hills Hydro Inc. continues to work actively on participant engagement. In addition Halton Hills Hydro Inc. has partnered with other LDCs, and has been working with the Ontario Power Authority ("OPA") and the Electrical Distribution Association ("EDA") to improve program effectiveness; however it is Halton Hills Hydro Inc.'s position that it will not fully overcome the forecasted peak demand savings shortfall.

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 (OEB) to establish Conservation and Demand Management (CDM) targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Halton Hills Hydro Inc. to require Halton Hills Hydro Inc., as a condition of its license, to achieve 22.48 GWh of energy savings and 6.15 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister's directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the Code) on September 16, 2010. The code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Halton Hills Hydro Inc. submitted its CDM Strategy on November 30, 2010 which provided a high level of description of how Halton Hills Hydro Inc. intended to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the Board. This is the second Annual Report by Halton Hills Hydro Inc. and has been prepared in accordance with the Code requirement and covers the period from January 1, 2012 to December 31, 2012.

Halton Hills Hydro Inc. submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges experienced by Halton Hills Hydro Inc. for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified that the delay in the roll out of 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 Halton Hills Hydro Inc. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (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 Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand savings targets. Therefore, the main focus of Halton Hills Hydro Inc. remains the achievement of CDM targets by December 31, 2014.

1 Conservation Framework

1.1 Current Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Government's Directive to the OEB to establish CDM targets that would be met by electricity distributors recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, support the provincial integrated supply plan, as well as address local distribution and transmission supply constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved and OPA Province-Wide programs and be a portfolio that would meet both broad and specific customer needs.

Halton Hills Hydro Inc. has not applied for any Board-Approved programs in recognition of a long and costly approvals process and has adjusted its original CDM Strategy (as submitted on November 1, 2010) based on the OPA CDM Resource Planning Tool which predicts that that Halton Hills Hydro will meet 96% of its energy target but only 70% of its demand target. Province-Wide OPA programs were sequentially released in 2011 and even 2012 and as a result will not have sufficient time available to make up the shortfall... This has produced restricted savings and has limited the associated opportunity for Halton Hills Hydro Inc. to meet its targets. The process to introduce changes to current program Initiatives or to pilot new Initiatives has been challenging, taking considerable cost and effort, which has resulted in delayed benefits to customers and CDM savings.

Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths with a view to create new programs, introduce them into the marketplace quickly and develop processes that deal with unforeseen circumstances and change quickly.

The Ministerial Directive provides continuity of the conservation programs and associated compensation for the participants; however the subsequent savings are currently not attributed to any LDC target and could become "stranded" due to misalignment of the current CDM framework and LDC Targets. In addition, the establishment of defined administrative funding for 2015 is required to avoid a "stop and start" process of marketing and implementing programs.

1.2 Future Framework

Halton Hills Hydro Inc. is supportive of government's ongoing commitment for conservation and demand management in Ontario. Halton Hills Hydro Inc. is committed to working with the provincial government and other stakeholders to develop the next framework for CDM in the Province.

Long-term commitment for CDM funding and a confirmation of the role of the LDC are needed. This is critical if LDCs are to maintain current program infrastructure including LDC staff and third party contracts through 2015.

Providing clarity and continuity into the next framework is critical for all customers. To ensure a seamless and smooth transition that maintains and builds upon CDM momentum beyond 2014 and allows for planning, a new CDM framework should be in place well before the expiry of the current one. Work involving key parties including LDCs, government, customer groups and OEB should start in 2013 to allow for a new framework to be in place by early 2014. The remainder of 2014 would be utilized for program development and design, economic analysis, procurement and launching of new CDM program initiatives.

2 Board-Approved CDM Programs

2.1 Introduction

In its Decision and Order dated November 12 2010 (**EB-2010-0215 & EB-2010-0216**), 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 Conservation and Demand Management (“CDM”) program that is being offered in Halton Hills Hydro Inc.’s service area.

2.2 TOU Pricing

2.2.1 BACKGROUND

In its April 26, 2012 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 (“GAM”).

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, 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. Halton Hills Hydro Inc. will report these results upon receipt from the OPA.

At the time of preparation of this report the OPA had retained the Brattle Group as the evaluation contractor and will be working with an expert panel convened to provide advice on methodology, data collection, models, etc. The initial evaluations were conducted with five LDCs – Hydro One, Toronto Hydro Electric System Ltd., Ottawa Hydro, Thunder Bay Hydro and Newmarket Hydro. Preliminary results from these 5 LDCs have not been issued.

As of September 30, 2013, the OPA has not released any verified results of TOU savings to Halton Hills Hydro Inc. Therefore Halton Hills Hydro Inc. is not able to provide any verified savings related to LDC's TOU program at this time. In August 2013, the OPA released a preliminary estimate of 308 MW of province-wide peak demand savings from TOU. This, when extrapolated to Halton Hills Hydro Inc., may lead to an additional realization of demand savings of 1.5 MW.

2.2.2. TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-Round

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

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

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided below:

RPP TOU	Rates (cents/kWh)		
	On Peak	Mid Peak	Off Peak
Effective Date			
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

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

Initiative Activities/Progress:

Halton Hills Hydro Inc. began transitioning its RPP customers to TOU billing on June 1, 2011. At December 31st, 2012, 19,025 RPP customers were on TOU billing.

2.3 Halton Hills Hydro Inc.'s Application with the OEB

Halton Hills Hydro Inc. did not submit any applications for Board-Approved CDM Programs in 2012.

3. OPA-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective February 15, 2011, Halton Hills Hydro Inc. entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, and are listed below. Program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in 2011:

Initiative	Schedule	Date schedule posted	Customer Class
Residential Program			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	All residential rate classes
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes
Retailer Co-op	n/a	n/a	All residential rate classes
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes
Commercial & Institutional Program			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above

Industrial Program			
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above
Key Account Manager ("KAM")	Schedule D-4	May 31, 2011	General Service 50 kW & above
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above
Home Assistance Program			
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes

In addition, results were realized towards LDC's 2011-2014 target through the following pre-2011 programs:

Pre-2011 Programs			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes
Toronto Comprehensive	n/a	n/a	All general service classes
Multifamily Energy Efficiency Rebates	n/a	n/a	All general service classes
Data Centre Incentive Program	n/a	n/a	All general service classes
EnWin Green Suites	n/a	n/a	All general service classes

As per the table below, several program initiatives are no longer available to customer or have not been launched in 2012.

Initiative Not in Market in 2012	Objective	Status
Residential 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 in Q2, 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 in Q2, 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.	Launched in 2013 by 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 in Q2, 2013.
Commercial & 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”)	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master CDM Program Agreement includes program change management provisions in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011, and continued in 2012, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and Initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

3.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available on the OPA's website at <http://www.powerauthority.on.ca/lcd-province-wide-program-documents> and additional initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>.

3.2.1 RESIDENTIAL PROGRAMS

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 help the environment.

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

Discussion:

Halton Hills Hydro Inc. has dedicated significant effort to marketing CDM programs over which it has a high degree of control over to residential customers within its service territory. Programs such as Residential Demand Response, Appliance Retirement and the HVAC Incentives are marketed directly by Halton Hills Hydro Inc. to residential customers. Programs such as Appliance Exchange, Conservation Instant Coupon Booklet, and Retailer Events are centrally marketed by the OPA resulting in Halton Hills Hydro Inc. having less control over outcomes.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. Halton Hills Hydro Inc. dedicated significant effort in marketing Initiatives from these previous programs and market saturation, measured by decreasing uptake is evident in the residential sector.

Work to revitalize and increase the offerings, effectiveness and breadth of the Initiatives through the Residential Program needs to be a high priority. There are opportunities within the Residential marketplace that need to be identified, developed and offered to customers. A revised home audit and other Initiatives which could engage an average residential customer could be considered. Increased control by the LDCs such as 100% attributable coupons for LDCs and/or LDC hosted exchange events may present an opportunity for improved saving.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress: 109 Appliances Retired in 2012

Marketing and promotional activity included:

- Earth Hour Star gazing
- Eco Fair Georgetown Market Place
- Exchange Event
- Big Daddy Festival, Downtown Georgetown
- Canada Day celebration, Glen Williams
- Leathertown Festival
- Georgetown Fall Fair
- Acton Fall Fair
- HHH Community Open House Event
- Halton Student Eco Celebrations
- Santa Claus Parade
- Light up the Hills
- Mayor's Christmas Luncheon
- Alumni Benefit Campaign (CAS) – Hockey Game
- Facebook, Twitter, website

Additional Comments:

- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to have reached market saturation.
- Rather than abandon refrigerators from this Initiative, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be strengthened through program evolution.
- As results are very responsive to province wide advertising OPA provincial marketing should continue to play a key role.
- The OPA and LDCs can continue working to establish partnerships with Independent retailers and municipalities.

3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress: 17 Appliances Exchanged in 2012

- Earth Hour Star gazing
- Eco Fair Georgetown Market Place
- Exchange Event
- Big Daddy Festival, Downtown Georgetown
- Canada Day celebration, Glen Williams
- Leathertown Festival
- Georgetown Fall Fair
- Acton Fall Fair
- HHH Community Open House Event
- Halton Student Eco Celebrations
- Santa Claus Parade
- Light up the Hills
- Mayor's Christmas Luncheon
- Alumni Benefit Campaign (CAS) – Hockey Game
- Facebook, Twitter, website

Additional Comments:

- For this Initiative, eligible measures and incentive amounts are influenced by a retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the uptake potential for this Initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative. The fall events have not had retailer participation.
- Improved communications regarding scheduling of future Appliance Exchange Initiative events would result in a higher participation rate by Halton Hills Hydro Inc. along with higher uptake by consumers.
- This Initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of ARCA for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress: 406 HVAC components were replaced in 2012

Marketing Activities:

- Earth Hour Star gazing
- Eco Fair Georgetown Market Place
- Exchange Event
- Big Daddy Festival, Downtown Georgetown
- Canada Day celebration, Glen Williams
- Leathertown Festival
- Georgetown Fall Fair
- Acton Fall Fair
- HHH Community Open House Event
- Halton Student Eco Celebrations
- Santa Claus Parade
- Light up the Hills
- Mayor's Christmas Luncheon
- Alumni Benefit Campaign (CAS) – Hockey Game
- Facebook, Twitter, website

Additional Comments:

- Customer participation has made a significant contribution to Halton Hills Hydro Inc.'s progress to target. Increased marketing and promotion will take place in 2013 in order to further increase participation. It is hoped that the introduction of an Air Miles incentive in 2013 will help with this.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and central air conditioner sales to eligible customers. Awareness should be increased with end-use customers to ensure that they are purchasing eligible units from qualified contractors.
- Channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. Due to a contracting delay no applications were processed from approximately the end of October 2012 to February 2013.
- LDC HVAC reports have been delayed and are not as complete and accurate as are required by LDCs to make adjustments to their marketing strategies.
- In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents an impediment to contractor sales. It has been noted that there

are approximately 4,500-5,000 HVAC contractors in the Province, however only 1500 are participating in program.

- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the Initiative, these installations should be attributed to the appropriate LDC.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress: 169 coupons redeemed in 2012

Marketing Activity:

- Earth Hour Star gazing
- Eco Fair Georgetown Market Place
- Exchange Event
- Big Daddy Festival, Downtown Georgetown
- Canada Day celebration, Glen Williams
- Leathertown Festival
- Georgetown Fall Fair
- Acton Fall Fair
- HHH Community Open House Event
- Halton Student Eco Celebrations
- Santa Claus Parade
- Light up the Hills
- Mayor's Christmas Luncheon
- Alumni Benefit Campaign (CAS) – Hockey Game
- Facebook, Twitter, website

Additional Comments:

- This Initiative was dormant for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. Halton Hills Hydro Inc. experienced a 94% reduction in coupon redemption in 2012 from 2013.
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behaviour. This also resulted in the delayed launch of the Initiative in 2012.
- Coupon booklets were not printed and mailed out in 2012. As such, Coupons were not widely available to consumers unless they were able and knowledgeable to download and print them.

- Without Provincial coupon distribution, and delay in Initiative launch, consumers may not have been aware of the online coupons. This Initiative could benefit from provincial marketing as a substitute to distribution.
- LDCs should be able to custom code all coupons to provide 100% allocation and promote specific coupons based on localized needs.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.

3.2.1.5 *Bi-Annual Retailer Event Initiative (Exhibit C)*

Initiative Activities/Progress: 5,808 coupons redeemed in 2012

Marketing and promotional activity included:

- Earth Hour Star gazing
- Eco Fair Georgetown Market Place
- Exchange Event
- Big Daddy Festival, Downtown Georgetown
- Canada Day celebration, Glen Williams
- Leathertown Festival
- Georgetown Fall Fair
- Acton Fall Fair
- HHH Community Open House Event
- Halton Student Eco Celebrations
- Santa Claus Parade
- Light up the Hills
- Mayor's Christmas Luncheon
- Alumni Benefit Campaign (CAS) – Hockey Game
- Facebook, Twitter, website

Additional Comments:

- This Initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- Limited engagement of local retailers can restrict the savings potential for this Initiative.

- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for Initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion.
- LDCs should be able to custom code all coupons to provide 100% allocation and promote specific coupons based on localized needs.
- Communications regarding retailer participation is delayed. Improved communications will aid in appropriate Halton Hills Hydro Inc. resource allocation and marketing of the Initiative.
- This Initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.

3.2.1.6 Retailer Co-op

Initiative Activities/Progress: No activities or progress in 2012

Additional Comments:

- This is a retailer Initiative over which Halton Hills Hydro Inc. has little influence
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- The availability of retailer and/or Halton Hills Hydro Inc. staff with product knowledge and the ability to conduct demonstrations in stores during the events would be an asset. This could be a valuable role for Halton Hills Hydro Inc.

3.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress: No activities or progress in 2012

Additional Comments:

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers and local builders regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.

- Following limited participation in 2011, the application process was revisited in 2012 to streamline administration in response to builder feedback. Participation levels are expected to grow but there will be a lag to when results materialize as pre-approved homes could take a year or more to be completed.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association (“EDA”) Working Groups, changes are being processed through change management for 2012.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress: 1,066 Devices installed in 2012

Marketing and promotional activity included:

- Earth Hour Star gazing
- Eco Fair Georgetown Market Place
- Exchange Event
- Big Daddy Festival, Downtown Georgetown
- Canada Day celebration, Glen Williams
- Leathertown Festival
- Georgetown Fall Fair
- Acton Fall Fair
- HHH Community Open House Event
- Halton Student Eco Celebrations
- Santa Claus Parade
- Light up the Hills
- Mayor’s Christmas Luncheon
- Alumni Benefit Campaign (CAS) – Hockey Game
- Facebook, Twitter, website

Additional Comments:

- The schedule for Peaksaver Plus was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. The product procurement process uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, Halton Hills Hydro Inc. could not be in market with the Peaksaver Plus program until July 2012. Smart Meters installed by most LDCs do not have the capability to communicate directly to an In Home Display. When proposing technical Initiatives that rely on existing LDC hardware or technology there should be a consultative process.

- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the Smart Meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an In Home Display (IHD) which might not be possible all the time and when IHD is optional.
- This is the main Initiative within the Residential portfolio that drives savings for LDCs.
- Given the different LDCs smart meter environments, and needs, each LDC is positioning the Initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- There currently is not an avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits.

3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

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

Targeted Customer Type(s): Commercial, Institutional, Agricultural, Multi-family buildings, Industrial

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

Discussion:

Throughout 2011 and 2012 the Commercial and Institutional (C&I) Working Group has strived to enhance the existing C&I programs. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the process.

Marketing and Promotional Events:

- Halton Hills Chamber of Commerce Business After 5
- Town of Halton Hills Sustainability Workshop
- McMaster University CDM Conference
- Contractor Breakfast Seminar
- Commercial Customer Breakfast Seminar
- Town of Halton Hills Community Sustainability Strategy Celebration
- Town of Halton Hills Mayor's Christmas Luncheon
- Halton Hills Hydro Community Open House Event

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

Initiative Activities/Progress: 19 projects completed in 2012 resulting in 264 kW achieved.

Halton Hills Hydro Inc. has made material investments in program delivery as the ERII program is seen as the most significant contributor towards attainment of the CDM targets. A traditional sales and marketing based approach has been employed to attract the greatest number of customers possible and include the greatest range of energy efficiency measures available.

A sales prospecting telemarketer has been retained to contact all business customers within Halton Hills with the goal of establishing sales appointments with individuals who are able to make purchasing decisions with respect to the operating efficiency of the plant and property.

A technically qualified sales person then calls on the prospect, reviews the programs and offers to conduct a site assessment to identify potential energy conservation measures. Should potential measures be identified, pre-qualified preferred vendors, with the customer's consent, are invited to submit proposals for the following common energy conservation measures:

- Lighting
- Air Compressors
- Demand Response
- Power Factor and Power Quality issues

For measures beyond the scope above, a technical specialist is utilized to evaluate the customer's systems and make recommendations for additional measures. These may include:

- Variable Frequency Drives
- HVAC Improvements
- Refrigeration Systems or Chillers
- Process Improvements

Vendors and suppliers who can assist with implementation are then invited, with the customer's consent, to submit proposals for consideration.

A program application specialist is assigned to the customer and contractor(s), if applicable to assist with all aspects of submitting an application to for incentives.

The sales database is reviewed regularly and sales strategies for customers with large potential conservation opportunities are developed. Barrier analysis is conducted regularly in an effort to help customers overcome obstacles to implementation of energy efficiency. Other stakeholders, such as Union Gas (who offer a range of incentive programs designed to reduce natural gas consumption), are regularly consulted for sales related information.

Seminars and workshops are regularly conducted to increase market awareness and draw additional customers into the program.

Additional Comments:

- The marketplace largely understands the program.
- The centralized process review used for 2012 project payment has been streamlined by the OPA and payments for projects were greatly improved – faster and more consistent compared to 2011.
- Capability building programs from Industrial programs have had very positive contributions to ERIL program.
- This Initiative is limited by the state of the economy and the ability of industrial/commercial/institutional facility to complete capital upgrades. Many organizations would like to implement energy efficiency improvements but are limited by capital constraints and minimum thresholds regarding payback.
- A number of customer facing issues in CRM (the OPA centralized application system) have been resolved.
- Applicants and Applicant Representatives continue to experience difficulty with the online application system. This issue has been addressed by Halton Hills Hydro Inc. through application training workshops and assignment of an individual who provides application assistance and who acts as an Application Representative to customers, channel partner/contractor training. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of Channel Partners is essential to program success.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the customer's physical plant.

- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be continually updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the technology.
- Expanding the capacity of the engineered applications can offer customers an opportunity to maximize savings and incentives.
- A concern respecting the equipment replacement initiative is the “hard stop” of the program as of a specific date. Without a streamlined transition into a new program, many customers may feel pressured by the deadline and may miss an opportunity to participate. While the Ministerial Directive provides continuity of the conservation programs for the Participant, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. The establishment of defined administrative funding for 2015 is required to avoid a “stop and start” process.

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

Initiative Activities/Progress: 11 Projects completed in 2012, resulting in 9 kW

Additional Comments:

- Successful execution of this program prior to 2011 has resulted in nearly 100% saturation of the marketplace. Very little opportunity remains. Customers who declined participation have been subject to an ongoing sales effort in order to secure participation.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations.
- Halton Hills Hydro Inc. subcontracted sales and installation to a third party contractor. The contractor is having difficulty securing incremental sales due to lack of labour rate increases, increasing cost of materials, greater travelling distances between Participants and higher sales costs due to an eroding opportunity base. Eligibility requirements have now been expanded but communication to potential Participants has not effectively resulted in increased uptake.
- Currently LDCs are unable to offer these expanded incentives to prior participants. The ability to return to prior participants and offer an expanded incentive on the remaining measures has potential to provide additional energy and demand savings.

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

Initiative Activities/Progress: No projects completed in 2012

Additional Comments:

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

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

Initiative Activities/Progress: No projects completed in 2012

Additional Comments

- Halton Hills Hydro subcontracts Initiative delivery to Enbridge who subsequently subcontracted to Union Gas. This was undertaken because of Union Gas' proven track record in program delivery and to achieve program efficiencies as Union Gas is currently delivering the program for the benefit of its Natural Gas customers.
- There is typically a long sales cycle for these projects, and then a long project development cycle. As the program did not launch until mid-2011 and had limited participation, results did not appear in 2011. Minimum results are expected to appear in 2012. The majority of the results are expected in 2013-2014.
- With the Ministerial Directive facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing efficient measures.

- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled subcontractor staff. As there has been no defined administrative funding beyond 2014, Halton Hills Hydro Inc. is unsure how these project applications will be finalized.
- The effort required to participate through the custom stream exceeds the value of the incentive for many customers.

3.2.2.5 *Energy Audit Initiative*

Initiative Activities/Progress: No projects completed in 2012

- Customer uptake was limited in 2011, however improved throughout 2012 especially with the new audit component for one system (compressed air).
- The energy audit Initiative is considered an ‘enabling’ Initiative and ‘feeds into’ other saveONenergy Initiatives. There are no savings attributed to LDC targets from an audit.
- Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the Halton Hills Hydro Inc. to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.

3.2.3 INDUSTRIAL PROGRAM

Description: Large facilities are discovering the benefits of energy efficiency through the Industrial Programs which are designed to help identify and promote energy saving opportunities. It 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 has been able to provide valuable resources to large facilities such as Energy Managers and enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy Managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Halton Hills Hydro Inc. has adopted a strategy of providing support directly to end use customers through its sales and technical team. As long lead cycles are required to undertake Engineering Studies and Energy Managers may be difficult to recruit, Halton Hills Hydro Inc. believes that it can bring projects to implementation faster through its sales and marketing approach.

Due to the size, scope and long lead time of these Initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however the subsequent savings would not be attributed to any LDC target.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of these Initiatives. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking forward there is minimal opportunity to make additional valuable changes to the current program suite and have these changes reflected in LDC 2014 results

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

Initiative Activities/Progress: No Projects completed in 2012

Additional Comments:

- This Initiative is limited by the state of the economy and the ability of a facility to undertake and finance large capital projects.
- There is typically a long sales cycle for these projects, and then a long project development cycle. The majority of the results are expected in 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is a new agreement for 'small' projects which is a simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream. Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements.
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.

3.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

Initiative Activities/Progress: No projects completed in 2012

Additional Comments:

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, no applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.

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

3.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress: No projects completed in 2012

Additional Comments:

- Some LDCs and Customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to 7 months to have a resource in place. Halton Hills Hydro Inc. prefers an approach whereby it provides like services directly to customers using its sales and technical resources team. This results in faster identification of measures. Customers incur minimal bureaucracy through this methodology.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish “credibility”.

3.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress: No Account Managers implemented in 2012

Additional Comments

- Customers appreciate dealing with a single contact to interface with Halton Hills Hydro Inc., a resource that has both the technical and business background who can communicate easily with the customer. Halton Hills Hydro Inc. has fulfilled this function through its sales and technical team
- This resource has been found by some LDCs to be of limited value due to the part-time nature of the position and limited funding. In addition, the position role has been too narrow in scope to provide assistance to the wider variety of projects LDCs may be struggling with.

3.2.3.5 Demand Response 3 (Schedule D-6)

Initiative Activities/Progress: 2 Participants registered in 2012, resulting in a capacity of 367 kW

Additional Comments:

- Until early 2013 customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited Halton Hills Hydro Inc.'s ability to effectively market to prospective participants and verify savings.
- Prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue.

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

Initiative Activities/Progress: No homes participated in 2012

Additional Comments:

- Halton Hills Hydro Inc. has subcontracted this Initiative to Union Gas to take advantage of their prior experience market a similar natural gas based program to the same target market.
- Awareness of the program amongst social agencies took time to develop. Benefits started to become evident in late 2012.
- Centralized payment processes were not developed in 2011. The payment process was established in 2012.
- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and is showing benefits in 2013.
- The financial scope, complexity, and customer privacy requirements of this Initiative are challenging for LDCs and most have contracted this program out. This Initiative may benefit from an OPA contracted centralized delivery agent.

3.2.5 PRE-2011 PROGRAMS

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

4 2012 LDC CDM Results

4.1 Participation and Savings

Table 1: Incremental Activity

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	2011-2014 Net Cumulative Energy Savings (kWh) 2014
Consumer Program															
Appliance Retirement	Appliances	229	109			13	6			94,294	44,553			19	510,430
Appliance Exchange	Appliances	13	17			1	3			1,192	4,504			3	17,398
HVAC Incentives	Equipment	610	390			174	88			319,154	150,260			261	1,727,394
Conservation Instant Coupon Booklet	Coupons	2,764	169			6	1			104,256	7,655			8	439,988
Bi-Annual Retailer Event	Coupons	4,765	5,808			9	8			160,889	146,623			17	1,083,425
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)*	Devices	179	468			100	215			257	1,619			0	1,876
Residential Demand Response (IHD)	Devices	0	473			0	0			0	0			0	0
Residential New Construction	Homes	0	0			0	0			0	0			0	0
Consumer Program Total						303	321			680,041	355,213			308	3,780,511
Business Program															
Retrofit	Projects	9	19			48	264			377,208	1,766,601			312	6,808,634
Direct Install Lighting	Projects	38	11			42	9			97,298	35,757			39	464,447
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	0	0			0	0			0	0			0	0
Energy Audit	Audits	0	0			0	0			0	0			0	0
Small Commercial Demand Response (switch/pstat)*	Devices	0	0			0	0			0	0			0	0
Small Commercial Demand Response (IHD)	Devices	0	0			0	0			0	0			0	0
Demand Response 3*	Facilities	1	1			78	78			3,050	1,139			0	4,189
Business Program Total						168	351			477,556	1,803,496			351	7,277,269
Industrial Program															
Process & System Upgrades	Projects	0	0			0	0			0	0			0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	0			0	0			0	0			0	0
Retrofit	Projects	2				16				103,574				16	414,297
Demand Response 3*	Facilities	1	1			421	289			24,735	6,964			0	31,699
Industrial Program Total						438	289			128,309	6,964			16	445,995
Home Assistance Program															
Home Assistance Program	Homes	0	0			0	0			0	0			0	0
Home Assistance Program Total						0	0			0	0			0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	6	0			113	0			606,286	0			113	2,425,145
High Performance New Construction	Projects	0	0			0	0			1,182	0			0	4,729
Toronto Comprehensive	Projects	0	0			0	0			0	0			0	0
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0			0	0
LDC Custom Programs	Projects	0	0			0	0			0	0			0	0
Pre-2011 Programs completed in 2011 Total						113	0			607,468	0			113	2,429,874
Other															
Program Enabled Savings	Projects														
Time-of-Use Savings	Homes														
Other Total							0				0			0	0
Adjustments to Previous Year's Verified Results															
							-38				-57,377			-38	-229,506
Energy Efficiency Total						422	379			1,865,333	2,155,952			788	13,895,886
Demand Response Total (Scenario 1)						599	582			28,041	9,722			0	37,763
OPA-Contracted LDC Portfolio Total						1,021	924			1,893,374	2,108,297			750	13,704,143
* Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1, 2011.												* Verified activity & savings data is not available at this time. Unverified 2012 results are used in this draft report but will be replaced with verified data in the final report.			
												Full OEB Target:		6,150	22,480,000
												% of Full OEB Target Achieved to Date (Scenario 1):		12.2%	61.0%

Table 2: Summarized Program Results - 2012

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total	441	595,270	380	357,570	310	3,786,726
Business Program Total	346	2,301,448	351	1,803,496	351	7,277,269
Industrial Program Total	367	8,103	289	6,964	16	445,995
Home Assistance Program Total	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total	1	599	1	599	114	2,431,672
Total OPA Contracted Province-Wide CDM Programs	1,155	2,905,420	983¹	2,111,280²	753³	13,712,266⁴

Notes to Table 2:

- ¹ Total is reduced by an negative adjustment of 38 kW attributed to prior year results
- ² Total is reduced by a negative adjustment of 57,349 kWh attributed to prior year results
- ³ Total is reduced by a negative adjustment of 38 kW attributed to prior year results
- ⁴ Total is increased by a negative adjustment of 229,397 kWh attributed to prior year results

4.2 Evaluation

The evaluation methodology employed by the OPA to calculate net demand and energy savings which contribute to Targets is as follows:

METHODOLOGY			
All results are at the end-user level (not including transmission and distribution losses)			
EQUATIONS			
Prescriptive Measures and Projects	Gross Savings = Activity * Per Unit Assumption Net Savings = Gross Savings * Net-to-Gross Ratio All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)		
Engineered and Custom Projects	Gross Savings = Reported Savings * Realization Rate Net Savings = Gross Savings * Net-to-Gross Ratio All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)		
Demand Response	Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)		
Adjustments to Previous Year's Verified Results	All errors and omissions from the prior years Final Annual Results report will be adjusted within this report. Any errors and omissions with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the cumulative effect of energy savings.		
Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Consumer Program			
Appliance Retirement	Includes both retail and home pickup stream; Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection	Savings are considered to begin in the year the appliance is picked up.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Appliance Exchange	When postal code information is provided by customer, results are directly attributed to the LDC. When postal code is not available, results allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year that the exchange event occurred	
HVAC Incentives	Results directly attributed to LDC based on customer postal code	Savings are considered to begin in the year that the installation occurred	

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC; Otherwise results are allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year in which the coupon was redeemed.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Bi-Annual Retailer Event	Results are allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year in which the event occurs.	
Retailer Co-op	When postal code information is provided by the customer, results are directly attributed. If postal code information is not available, results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year of the home visit and installation date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Residential Demand Response	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year and accounts for any "snapback" in energy consumption experienced after the event. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Business Program			
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Additional Note: project counts were derived by filtering out "Application Status" = "Post-Project Submission - Payment denied by LDC" and only including projects with an "Actual Project Completion Date" in 2012 and pulling both the "Application Name" field followed by the "Building Address 1" field from the Post Stage Retrofit Report and finally performing a count of the Building Addresses.			

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a <i>peaksaver</i> PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a result of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Industrial Program			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Manager	Results are directly attributed to LDC based on LDC identified in the application; No completed projects in 2011 or 2012.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

4.3 Spending

Table 3 - Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	8,183.75				8,183.75
Appliance Exchange	4,921.39				4,921.39
HVAC Incentives	3,175.80				3,175.80
Conservation Instant Coupon Booklet	5,839.39				5,839.39
Bi-Annual Retailer Event	2,085.39				2,085.39
Retailer Co-op					-
Residential Demand Response	78,540.01				78,540.01
New Construction Program	995.00				995.00
Business Program					
Efficiency: Equipment Replacement	97,625.75		225,711.96		323,337.71
Direct Installed Lighting	1,834.50		10,306.50		12,141.00
Existing Building Commissioning Incentive	3,588.67				3,588.67
New Construction and Major Renovation Initiative	3,588.68				3,588.68
Energy Audit	3,589.02		34,377.00		37,966.02
Small Commercial Demand Response (part of Industrial p					-
Demand Response 3 (part of the Industrial p					-
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	-				
b) detailed engineering study	-				
c) program incentive	3,777.84				
Monitoring & Targeting	1,303.37				
Energy Manager					
Key Account Manager ("KAM")					
Efficiency: Equipment Replacement Incentive					
Demand Response 3	9,895.38				
Assistance Program					
Home Assistance Program	4,744.96				
Pre 2011 Programs					
Electricity Retrofit Incentive Program					
High Performance New Construction					
Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)					
Home Energy Audit Tool					
TOTAL Province-wide CDM PROGRAMS					

Table 4: 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	24,479.75				24,479.75
Appliance Exchange	4,921.39				4,921.39
HVAC Incentives	5,510.80				5,510.80
Conservation Instant Coupon	12,095.39				12,095.39
Bi-Annual Retailer Event	2,085.39				2,085.39
Retailer Co-op					-
Residential Demand Response	134,193.01	279,779.00	4,350.00		418,322.01
New Construction Program	1,408.00				1,408.00
Business Program					
Efficiency: Equipment Replacement	173,676.75		256,241.96		429,918.71
Direct Installed Lighting	13,953.50	2,695.00	52,008.50		68,657.00
Existing Building Commissioning	4,341.67				4,341.67
New Construction and Major Renovation	4,341.68				4,341.68
Energy Audit	9,594.02		34,377.00		43,971.02
Small Commercial Demand Response					-
Demand Response 3 (part of)	24,203.38				24,203.38
Industrial Program					
Process & System Upgrades					-
a) preliminary engineering	-				-
b) detailed engineering studies	-				-
c) program incentive	3,777.84				3,777.84
Monitoring & Targeting	4,731.37				4,731.37
Energy Manager					-
Key Account Manager ("KAM")					-
Efficiency: Equipment Replacement					-
Demand Response 3					-
Home Assistance Program					
Home Assistance Program	4,744.96				4,744.96
Pre 2011 Program					
Electricity Retrofit Incentive			147,841.00		147,841.00
High Performance New Construction					-
Toronto Comprehensive					-
Multifamily Energy Efficiency					-
Data Centre Incentive Program					-
EnWin Green Suites					-
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)					
Home Energy Audit Tool					
TOTAL Province-wide CDM Program	428058.9				1,205,351.36

Combined CDM Reporting Elements

4.4 Progress towards CDM Targets

Table 5: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by OPA	1.0	0.4	0.4	0.4
2012 – Verified by OPA		1.0	0.3	0.3
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				0.8
Halton Hills Hydro Inc. 2014 Annual CDM Capacity Target:				6.2
Verified Portion of Peak Demand Savings Target Achieved (%):				12.2%

Table 6: 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	1.9	1.9	1.9	1.8	7.5
2012 – Verified by OPA		2.1	2.1	2.1	6.3
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					13.7
Halton Hills Hydro Inc. 2011-2014 Cumulative CDM Energy Target:					22.5
Verified Portion of Cumulative Energy Target Achieved (%):					61.0%

4.5 Variance from Strategy

Halton Hills Hydro is not proposing any variance from its strategy at this time.

4.6 Outlook to 2014 and Strategy Modifications

When examined on a Contribution to Targets basis, the demand achievement is 12% and the cumulative energy savings are 61%. Inclusion of demand responses increases the demand achievement to 23%. On this basis, Halton Hills Hydro Inc. is well on its way to achieving the energy target but achievement of the demand target is at risk. Halton Hills Hydro Inc.'s results are consistent with the Provincial median. The value and impact of the EM&V Protocols made and it clear that Halton Hills Hydro Inc. is at risk for not meeting CDM targets due to the results erosion arising from the Protocols which are established by the OPA.

The magnitude of the EM&V Protocol impact was not evident at the time of Master Agreement execution and will have an impact on Halton Hills Hydro Inc.'s ability to meet its OEB Targets. As gross savings are no longer reported by the OPA, Halton Hills Hydro Inc. can't estimate the gross demand and energy conservation achievements required to meet the OEB Targets, taking into account the impact of the OPA EM&V Protocols.

The OEB Targets were initially viewed by Halton Hills Hydro Inc. as being aggressive, but achievable. Halton Hills Hydro Inc. originally filed a CDM Strategy Plan with the OEB on November 1, 2010 which predicted achievement of its CDM Targets.

The following table represents the conservation achievements that Halton Hills Hydro Inc. will be required to attain in order to meet its OEB CDM targets:

Outlook to 2014							
	Program	Net Incremental Savings		Contribution to Targets			
		Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014 (excludes DR)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)		
Pre-2011 Programs Completed in 2011		114	608,067	114	2,431,672		
2011 (Verified)	Consumer Program Total (excl DR)	203	679,784	2011 Contributions are Rolled Forward into 2012			
	Residential Demand Response	100	257				
	Business Program Total (excl DR)	90	474,506				
	Demand Response 3	78	3,050				
	Industrial Program Total (excl DR)	16	103,574				
Demand Response 3	421	24,735					
Home Assistance Program	-	-					
2012 (Verified)	Consumer Program Total (excl DR)	108	355,524			310	3,784,424
	Residential Demand Response	272	2,046				2,302
	Business Program Total (excl DR)	273	1,802,357			351	7,273,080
	Demand Response 3	78	1,139		4,189		
	Industrial Program Total (excl DR)	-	-	16	414,296		
Demand Response 3	289	6,964		31,699			
Home Assistance Program	-	-	-	-			
2013 (Projected)	Consumer Program Total (excl DR)	150	700,000	146	1,050,000		
	Residential Demand Response	200	2,000		3,000		
	Business Program Total (excl DR)	400	2,100,000	388	3,150,000		
	Small Commercial Demand Response	100	1,000		1,500		
	Demand Response 3	400	5,000		7,500		
Industrial Program Total (excl DR)	50	1,100,000	49	1,650,000			
Demand Response 3	300	5,000		7,500			
Home Assistance Program	50	50,000	49	75,000			
2014 (Projected)	Consumer Program Total (excl DR)	100	675,000	97	337,500		
	Residential Demand Response	150	2,000		3,000		
	Business Program Total (excl DR)	325	2,000,000	315	1,000,000		
	Small Commercial Demand Response	25	1,000		500		
	Demand Response 3	250	5,000		2,500		
Industrial Program Total (excl DR)	50	1,100,000	49	550,000			
Demand Response 3	500	5,000		2,500			
Home Assistance Program	100	50,000	97	25,000			
OPA Adjustments (non DR)		- 38 -	57,349	- 38 -	229,397		
Energy Efficiency Total		1,991	11,741,463	1,941	21,575,765		
Demand Response Total		3,163	64,191				
OPA - Contracted Portfolio Total		5,154	11,805,654				
OEB Target				6,150	22,480,000		
% OEB Target Achieved (excl DR)				31.6%	96.0%		
% OEB Target Achieved (incl DR)				70.1%	96.0%		

Halton Hills Hydro Inc. is expected to meet its energy target, but may fall short on its demand target after taking the EM&V Protocols into account. Without these adjustments Halton Hills Hydro Inc. would otherwise surpass each of its targets by a significant margin.

In order to meet the demand target, considerably greater effort is required to secure and retain additional demand. The greatest component of erosion occurs due to the EM&V Protocol not recognizing the persistence of the demand response program (DR-3) past the initial contract year. The Protocol does provide for recognition in 2014 if the DR-3 resource is available for curtailment. Acquiring additional DR-3 and Peaksaver load and maintaining its persistence is a key element to the plan to achieve demand targets. If this load is acquired and retained, then Halton Hills Hydro Inc. will meet its demand target.

The consumer programs are generally thought to be maturing, meaning that uptake rates can't be driven further. The remainder must originate through the business programs available to the commercial and industrial sectors. However, the opportunity may be nearing saturation as well. Experience with past industrial/commercial programs has demonstrated that these consumers will only implement projects where paybacks are less than 3 years or when existing equipment has reached the end of its useful life and is replaceable with more efficient equipment.

Earlier research demonstrated which energy conservation measures delivery saving within the business sector as follows:

Measure	% of Total Conservation Opportunity
Lighting	76%
Air Compressors	9%
HVAC, Refrigeration, etc.	8%
All Other Measures Combined	7%

The lighting opportunity is heavily skewed towards the commercial sector.

Meeting the CDM Delivery Challenge

Halton Hills Hydro Inc. has taken the delivery of CDM Targets seriously and has created a delivery team made up of industry experts and leaders in their field, following these principles:

Focus on Largest Customers First

Delivery is designed to capture the largest MW and MWhr reductions first. This is important because the MWhr target is cumulative; the earlier large contributors are captured, the longer their benefit will accrue towards the accumulation. Halton Hills Hydro Inc.'s largest customers will be marketed to in descending order. Given the importance of these customers to the success of the program, Halton Hills Hydro Inc.'s senior executive meetings will be arranged with the senior executives of these customers in order to explain the goals of CDM and to seek their executive commitment to cause their organizations to participate in the programs.

Delivery Channels

Experience with pre-2011 CDM Programs demonstrated that consumer programs are best delivered through internal staff. The infrastructure to generate mass market materials (brochures, handouts, pamphlets, media events, promotion at public events, etc.) exists and has proven to be economic. Excellent results when measured in terms of participation rates in the pre-2011 programs such as The Great Refrigerator Round-up, Summer Savings, and PeakSaver have been achieved. For the 2011 to 2014 programs, consumer programs are being driven by experienced internal staff.

Sales Strategy

The sales strategy employed for the pre-2011 general service customers was largely passive. Potential participants were made aware of the program availability and its benefits through seminars and other forms of outreach, but participation was largely left up to the individual customers. If customers needed assistance with identifying energy efficiency measures or completing incentive application forms this was provided. Currently, the sales strategy is more pro-active. Customers, starting with the largest users, will be targeted through an active sales campaign.

Direct assistance with identifying energy efficiency projects will be provided including site assessments, energy efficiency measure identification, conceptual designs, identification of suitable vendors, suppliers and installers, procurement, incentive applications, inspections and due diligence.

Co-Promotion with Union Gas

Union Gas offers many incentive programs to assist customers with reduction of natural gas consumption. Often, during the course of site assessments, opportunities to reduce natural gas present themselves. Similarly, when Union Gas performs site assessments, opportunities to reduce electricity consumption become evident as well. Halton Hills Hydro Inc. now works closely with Union Gas to ensure that each other's programs are promoted. This will ensure that leads are generated by both Halton Hills Hydro Inc. and Union Gas to each other's benefit.

6.0 Conclusion

Over the course of 2012, Halton Hills Hydro Inc. has achieved 0.983 MW in peak demand savings and 2.11 GWh in energy savings, which represents 12.2% and 61.0% of Halton Hills Hydro Inc. 2014 target, respectively. These results are representative of a considerable effort expended by Halton Hills Hydro Inc., in cooperation with other LDCs, customers, channel partners and stakeholders. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

However, despite continuing improvements to existing programs Halton Hills Hydro Inc. faces challenges in the remaining years of the current CDM framework. With the current slate of available OPA Programs, and the current forecast of implementation and projected savings, Halton Hills Hydro Inc. expects to meet 96% of its consumption target but will struggle to meet its 6.15 MW demand target.

Looking ahead there is limited opportunity to make valuable changes to the current program portfolios and have these changes reflected in LDC 2014 results. However, LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the needs of the industry and consumers.

Appendix A: Initiative Descriptions

Residential Program

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

In Market Date: February 15, 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

In Market Date: February 15, 2011

HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: The objective of this Initiative is to encourage the replacement of existing heating systems with high efficiency furnaces equipped with Electronically Commutated Motors (ECM), and to replace existing central air conditioners with ENERGY STAR qualified systems and products.

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

Targeted End Uses: Central air conditioners and furnaces

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

In Market Date: February 15, 2011

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

Description: This Initiative provides customers with year round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy to install energy efficient measures and can be redeemed at participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at www.saveonenergy.ca.

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

Delivery: The 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.

In Market Date: February 15, 2011

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

Delivery: The 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.

In Market Date: March 2011

In Market Date: February 15, 2011

RETAILER CO-OP

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

Delivery: Retailers apply to the 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.

In Market Date: February 15, 2011

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

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

In Market Date: February 15, 2011

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

Objective: The objectives of this Initiative are to enhance the reliability of the IESO-controlled grid by accessing and aggregating specified residential and small commercial end uses for the purpose of load

reduction, increasing consumer awareness of the importance of reducing summer demand and providing consumers their current electricity consumption and associated costs.

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

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

Delivery: LDC's recruit customers and procure technology

In Market Date: February 15, 2011

C&I Program

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

In Market Date: February 15, 2011

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

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

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer a free installation of eligible lighting and water heating measures of up to \$1,000 to eligible owners and tenants of small commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity and peak demand savings.

Description: The Direct Installed Lighting Initiative targets customers in the General Service <50kW account category. This Initiative offers turnkey lighting and electric hot water heater measures with a value up to \$1,000 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,000 limit.

Target End Uses: Lighting and electric water heating measures

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

In Market Date: February 15, 2011

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

In Market Date: February 15, 2011

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

In Market Date: February 15, 2011

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

In Market Date: February 15, 2011

Industrial Program

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

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

Description: PSUI is an energy management Initiative that includes three Initiatives: (preliminary engineering study, detailed engineering study, and project incentive Initiative). The incentives are available to large distribution connected customers with projects or portfolio projects that are expected to generate at least 350 MWh of annualized electricity savings or, in the case of Micro-Projects, 100 MWh of annualized electricity savings. The capital incentive for this Initiative is the lowest of:

- a) \$200/MWh of annualized electricity savings
- b) 70% of projects costs
- c) A one year pay back

Targeted End Uses: Process and systems

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

In Market Date: February 15, 2011

MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

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

Description: This Initiative offers customers funding for the installation of a 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.

In Market Date: February 15, 2011

ENERGY MANAGER INITIATIVE (Schedule D-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

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

In Market Date: February 15, 2011

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

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

Delivery: LDC delivered

In Market Date: February 15, 2011

DEMAND RESPONSE 3 (Schedule D-6)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Commercial and Industrial Operations

Delivery: DR3 is delivered by Demand Response Providers (“DRPs”), under contract to the OPA. The OPA administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). OPA provides administration including settlement, measurement and verification, and

In Market Date: January 2011

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

LOW INCOME INITIATIVE (Home Assistance Program) (Schedule E)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

Description: This is a turnkey Initiative for income qualified customers. It offers residents the opportunity to take advantage of free installation of energy efficient measures that improve the comfort of their

home, increase efficiency, and help them save money. All eligible customers receive a Basic and Extended Measures Audit, while customers with electric heat also receive a Weatherization Audit. The Initiative is designed to coordinate efforts with gas utilities.

Targeted End Uses: End use measures based on results of audit (i.e. compact fluorescent light bulbs)

Delivery: LDC delivered.

In Market Date: February 15, 2011

Appendix B: Pre-2011 Programs

ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

Initiative Frequency: Year Round

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

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

Targeted End Uses: Electricity savings measures

Delivery: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year round

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

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

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

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

TORONTO COMPREHENSIVE INITIATIVE

Target Customer Type(s): Commercial and Institutional Customers

Initiative Frequency: Year round

Objective:

Description: This Initiative is specific to Toronto Hydro's Service Area.

Targeted End Uses:

Delivery:

MULTIFAMILY ENERGY EFFICIENCY REBATES

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

Initiative Frequency: Year round

Objective: Improve energy efficiency of Multi-unit building

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

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

Targeted End Uses: Electricity saving measures

Delivery: OPA contracted with Greensaver