



CANADIAN NIAGARA POWER INC.

A FORTIS ONTARIO  
Company

September 30, 2013

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

**RE: Canadian Niagara Power Inc. (ED-2002-0572)  
Conservation and Demand Management (CDM) Code for Electricity Distributors –  
CDM Annual Filing (EB-2010-0215)**

Dear Ms. Walli:

In accordance with the Ontario Energy Board's (OEB) "*Conservation and Demand Management Code for Electricity Distributors*", issued on September 16, 2010, attached is Canadian Niagara Power Inc.'s 2012 CDM Annual Report submission.

Sincerely

*Original Signed by*

Douglas Bradbury, P.Eng.  
Director, Regulatory Affairs

Enclosure



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# **Canadian Niagara Power Inc.**

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## **Conservation and Demand Management 2012 Annual Report**

**Submitted to:  
Ontario Energy Board**

**Submitted on September 30, 2013**

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## Executive Summary

This annual report is submitted by Canadian Niagara Power Inc. (“CNPI”) 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 report and modification to CNPI Strategy. Accordingly, this report outlines CNPI 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, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

CNPI 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 CNPI.

In 2011, CNPI contracted with the 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, CNPI offered all programs to customers, with the exception of Peaksaver Plus and Low Income. These two programs were delayed in rolling out to customers due to program delivery and service provider issues. With 2011 being a year of transition, mainly spent in “start-up mode”, 2012 was a year spent on building program awareness, prompting customer uptake, and mostly educating customers on both internal and external benefits of energy conservation within their own facilities. CNPI has encountered many challenges delivering CDM programs in its service territory. Central to these challenges has been the impact of the recent economic downturn in the economy and its lingering effects. CNPI has lost several major customers that would have significantly contributed to the system peak underpinning CNPI’s CDM targets. New growth remains minimal and many customers have indicated that current economic conditions are not favourable for the capital expenditures required to implement certain CDM initiatives. Feedback received from customers often site the conflicting messages in the public realm of energy conservation and the reported surplus of energy in the province.

As at December 31, 2012, CNPI had achieved 0.7 MW of net incremental peak demand savings and 11.6 GWh of net incremental energy savings. A summary of the achievements toward the CDM targets is shown below:

**OPA-Contracted Province-Wide CDM Programs FINAL 2012 Results**

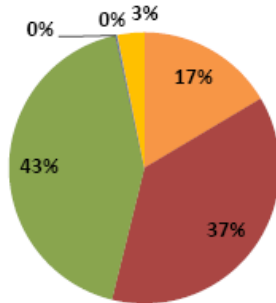
**LDC:** Canadian Niagara Power Inc.

FINAL 2012 Progress to Targets	2012 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	0.5	0.7	10.6%	14.1%
Net Energy Savings (GWh)	1.3	11.6	46.1%	46.2%

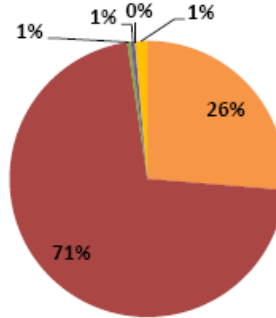
Scenario 1 = Assumes that demand resource resources have a persistence of 1 year  
 Scenario 2 = Assumes that demand response resources remain in your territory until 2014

**Achievement by Sector**

**2012 Incremental Peak Demand Savings (MW)**



**2012 Incremental Energy Savings (GWh)**



■ Consumer   
 ■ Business   
 ■ Industrial   
 ■ HAP   
 ■ Pre-2011   
 ■ True-up

The updated forecast prepared for this report is indicative of the challenges being experienced by CNPI. Although, the peak demand savings are tracking below target, CNPI expects to achieve the 2014 energy savings target of 25.08 GWh. CNPI continues to work actively on participant engagement. CNPI has partnered with other LDCs, and has been working with the Ontario Power Authority (“OPA”) and the Electrical Distribution Association (“EDA”) to improve the effectiveness of program delivery.

CNPI is proceeding in all efforts to achieve the mandated targets. CNPI feels cautiously optimistic that 2013 and 2014 will see increased participation in the saveONenergy CDM programs, specifically within the commercial/institutional customer base.

## 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 CNPI to require CNPI, as a condition of its license, to achieve 25.08 GWh of energy savings and 6.40 MW of 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, CNPI submitted its revised CDM Strategy on June 13, 2011 which provided a high level description of how CNPI intended to achieve its CDM targets.

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

CNPI submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges experienced for the January 1, 2011 to December 31, 2011 period. The OEB’s 2011 CDM Results report identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs, impacted the final 2011 results for the LDCs. 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.

This new Ministerial Directive did not amend the timelines for LDCs to achieve their energy and peak demand targets. Therefore, the main focus of the LDCs remains the achievement of CDM targets by December 31, 2014.

# 1 Board-Approved CDM Programs

## 1.1 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 licence, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two”. At this time, the implementation of Time-of-Use (“TOU”) Pricing has been deemed as a Board-Approved CDM program that is being offered in CNPI’s service areas of Fort Erie, Port Colborne and Gananoque.

## 1.2 TOU Pricing

### 1.1.1 BACKGROUND

In its April 26, 2012 CDM Guidelines, the OEB recognizes that a portion of the aggregate peak 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 Ministerial Directive dated March 31, 2010, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the Province, and allocated to LDCs. CNPI 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 5 LDCs – Hydro One, Toronto Hydro, Ottawa Hydro, Thunder Bay Hydro and Newmarket Hydro. Preliminary results from these 5 LDCs and were not available at the time of this report.

As of September 30, 2013, the OPA has not released any verified results of TOU savings to CNPI; therefore, CNPI is not able to provide any verified savings related to LDC’s TOU program. As CNPI did not begin transitioning customers to TOU pricing until June 1, 2012, we anticipate reporting only 31 months of attributable savings at the end of 2014 toward the mandated CDM target.

### 1.2.2 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 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:

<b>RPP TOU</b>	<b>Rates (cents/kWh)</b>		
	<b>On Peak</b>	<b>Mid Peak</b>	<b>Off Peak</b>
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:**

CNPI transitioned its RPP customers to TOU billing on June 1, 2012. At December 31, 2012, 15,295 RPP customers were on TOU billing. The delay in transitioning, approved by the OEB, was due to an internal billing system upgrade and subsequent integrated testing with the IESO system.

### **1.3 CNPI's Application with the OEB**

There were no additional CNPI programs requested in 2012.

## 2 OPA-Contracted Province-Wide CDM Programs

### 2.1 Introduction

Effective June 20, 2011, CNPI entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. In addition, results include projects started pre 2011 which were completed in 2011.

The delay in 2011 into entering an agreement between CNPI and the OPA was due to the assigning of targets and amalgamation of budget for the former Port Colborne Hydro Inc. service territory to CNPI. Effective August 1, 2012, CNPI assumed all responsibility of the Port Colborne service territory and rolled the entire LDC operation into CNPI.

Initiative	Schedule	Date schedule posted	Customer Class	LDC In-Market Date
<b>Residential Program</b>				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	All residential rate classes	June 10, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes	June 10, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes	June 10, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes	June 10, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes	June 10, 2011
Retailer Co-op	n/a	n/a	All residential rate classes	
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes	April 1, 2013
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes	June 10, 2011
<b>Commercial &amp; Institutional Program</b>				
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes	June 10, 2011
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW	June 10, 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes	June 10, 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes	June 10, 2011
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes	June 10, 2011
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes	April 1, 2013
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above	June 10, 2011

<b>Industrial Program</b>				
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above	June 10, 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above	June 10, 2011
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above	June 10, 2011
Key Account Manager ("KAM")	Schedule D-4	May 31, 2011	General Service 50 kW & above	June 10, 2011
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	June 10, 2011
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	June 10, 2011
<b>Home Assistance Program</b>				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	May 1, 2012

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

<b>Pre-2011 Programs</b>			
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 customers or have not been launched in 2012.

<b>Initiative Not in Market in 2012</b>	<b>Objective</b>	<b>Status</b>
<b>Residential Program</b>		
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.
<b>Commercial &amp; Institutional Program</b>		
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 are 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.
<b>Industrial Program</b>		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The CDM Master Service Agreement includes program change management provision in Article 3. Collaboration between the OPA and the 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 CDM 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.

## 2.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available from the OPA and additional initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>.

### 2.2.1 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:** The inclusion of LED technology into the Biannual Retailer events in 2012, and the annual coupons in 2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement. The revamped Peaksaver PLUS program is the main Residential Initiative which drives savings for LDCs. As CNPI did not launch this program until mid-2013, we anticipate the program will be well received by consumers eager to utilize an In-Home Display to help manage their energy consumption.

The Residential Program portfolio is predominately a carryover of Initiatives from previous programs. It is mostly driven by retailers and contractors who may not have fully delivered what was anticipated. Three new initiatives were never launched and subsequently removed from the schedule in 2013 with no new initiative additions. Delays in communication with regard to Initiative offerings and results reporting have hampered LDCs abilities to engage customers and promote participation. Provincial wide advertising has provided limited value due to inconsistency and non-specific messaging.

Work to revitalize and increase the 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 increased savings. However, some service territories may be lacking in retail establishments that participate in these programs.

CNPI has noted a downturn in retailer participation due to lack of content with regard to intangible offerings and perceived administrative difficulties. CNPI also noted that retailers appeared to be ill-prepared with inventory for specific events, as well as lack of knowledge on behalf of the local franchisee.

#### 2.2.1.1 Appliance Retirement Initiative (Exhibit D)

##### Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events

##### Additional Comments:

- With the increase in appliance age to 20 years in 2013, many LDCs increased marketing and outreach throughout 2012 in an effort to increase uptake and achieve savings.
- 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 and has been under consideration for removal from the portfolio.

- Rather than strictly remove this Initiative from the schedule, 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 rather than weakened through diminished program offerings.
- The OPA and LDCs can continue working to establish partnerships with Independent retailers and municipalities.

### **2.2.1.2 Appliance Exchange Initiative (Exhibit E)**

#### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events

#### **Additional Comments:**

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings 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, therefore savings budgeted by the LDCs have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired window A/C has dropped resulting in the retail participant not accepting window A/C's during the Spring 2013 event.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- 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. ARCA is the OPA-contracted company who services the Appliance Retirement program throughout the Province for pickup, decommissioning and recycling.
- The initiative appears to require more promotion from retailers and LDCs.

### **2.2.1.3 HVAC Incentives Initiative (Exhibit B)**

#### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- HVAC Contractor meetings
- Newspaper advertisements

#### **Additional Comments:**

- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to end of useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help with this.

- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel was undertaken by the LDC to drive a higher proportion of furnace and CAC sales to eligible units.
- 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 a restriction to contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province, however only 1500 are participating in program.
- CNPI has experienced that a number of participating contractors are unaware of this initiative as they were automatically signed up as part of their HRAI association membership. Having received no information and/or training on this initiative from HRAI, the contractor was not aware of the requirements or processes involved in participation.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match the 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. However, it has been found that participating contractors are providing customers with HVAC systems based on the customer's financial limits and, in most cases, are providing units that do not meet the program criteria.

#### **2.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)**

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Coupon handouts
- Community Events

##### **Additional Comments:**

- This Initiative was ineffective for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. As such, savings budgeted by LDCs did not materialize.
- 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 without the ability 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 push 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.
- CNPI has experienced that the redemption procedure for small retailers has been found to be too cumbersome; therefore resulting in retailers providing a discount equal to the OPA coupon value and eliminating paperwork. This results in LDCs not receiving allocated savings.

#### **2.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)**

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events

##### **Additional Comments:**

- This Initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- The Product list has changed very little over the past four years.
- 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 push specific coupons based on localized needs.
- Communications regarding retailer participation continues to be delayed. Improved communications will aid in appropriate 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.

#### **2.2.1.6 Retailer Co-op**

##### **Initiative Activities/Progress: N/A**

##### **Additional Comments:**

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



### **2.2.1.7 New Construction Program (Schedule B-2)**

#### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with Municipal Planning departments

#### **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 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 homes pre-approved 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. However, the lengthy change management process has resulted in continued non-participation from builders.
- The Ontario Building Code has also been updated to increase the minimum energy efficiency levels, therefore decreasing participation on this initiative.

### **2.2.1.8 Residential Demand Response Program (Schedule B-3)**

#### **Initiative Activities/Progress:**

- CNPI did not launch this program in 2012

#### **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, LDCs could not be in market with the Peaksaver Plus program until 2012, or later which has resulted in delayed savings.
- 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 an extensive 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.

- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.
- 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.

### **2.2.2 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 our existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

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

Objective: Designed to assist building owners and operators as well as tenants and occupants in achieving demand and energy savings, and to facilitate 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 and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management 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 completely removed from the process.

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

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as means to accelerate certain program changes.

Looking ahead there is minimal opportunity to make valuable changes to the current program suite and have these changes reflected in LDC 2014 results. LDCs and the OPA should look beyond the current Initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, which will meet the needs of the industry and consumers.

CNPI has experienced much reluctance from customers and contractors to participate in the saveONenergy CDM programs due to increased administrative steps in the application and payment process, as well as low incentives relative to criteria eligibility. CNPI continues to work with customers, contractors, channel partners, and program service providers to increase participation and ease the strain of the application and payment process.

#### **2.2.2.1 Efficiency: Equipment Replacement Incentive (ERII) (Schedule C-2)**

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.
- Offering services of Key Account Manager to under 5MW customers

**Additional Comments:**

- It appears that the marketplace continues to increase its understanding of programs and a large proportion of LDC savings are attributed to ERII.
- The centralized process review used for 2012 project payment continues to be streamlined by the OPA and payments for projects are improving.
- Capability building programs from Industrial programs have had very positive contributions to ERII program.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facilities to complete capital upgrades.
- A number of customer-facing issues in CRM (the OPA centralized application system) continue to be resolved; however key LDC administrative back office processing issues continue to be a challenge.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as customer Application Representatives. 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 mechanical world. There continues to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners.
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.
- Expanding the capacity of the engineered applications can offer customers an opportunity to maximize savings and incentives. Recognizing this, Toronto Hydro and London Hydro worked together to develop and provide the OPA with compressed air engineered worksheets for inclusion in the Initiative in Q3, 2012. To date, these have not been accepted and provided to LDCs for use.
- An identified deficiency in the various renditions of the equipment replacement is the “hard stop” of the program as of a specific date. Without a streamlined transition into a new program, many customers become frustrated and refused to participate. LDCs struggle to repair customer and channel partner relationships and gain momentum in the market place once again.
- While the recent Ministerial Directive provides stability of the conservation programs for the participant into 2015, unclear direction on LDC program administrative funding could result in many LDCs ‘ramping down’ programs in 2015, and as early as 2014 since the savings in 2015 are not allocated to LDCs. The establishment of defined program administrative funding for 2015 is required to avoid a “stop and start” process.

**2.2.2.2 Direct Install Initiative (DII) (Schedule C-3)****Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.

**Additional Comments:**

- Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative in some LDC's territories.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations.
- Electrical contractor's margins have been reduced due to no labour rate increase, increase in cost of materials, greater distances between retrofits, more door knocking required before a successful sale and no funding for lifts. This has led to a reduction in vendor channel participation in some regions.
- Ambiguity with regard to eligibility resulted in large lists of customers rejected following installation due to perceived ineligibility. Due to this, some LDCs were forced to carry considerable financial burden while this was in resolution.
- The eligibility requirements have now been revamped and expanded however there has been limited communication and documentation of this to the marketplace.
- Currently LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings.

**2.2.2.3 Existing Building Commissioning Incentive Initiative (Schedule C-6)****Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.

**Additional Comments:**

- Initiative name does not properly describe the Initiative.
- There was minimal participation for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.
- Participation is mainly channel partner driven, however the particulars of the Initiative have presented too significant of a barrier for many channel partners to participate.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning and chilled water systems used for other purposes should be made eligible and considered through Change Management.
- 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.

**2.2.2.4 New Construction and Major Renovation Initiative (HPNC) (Schedule C-4)****Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets

- Community Events
- Meetings with customers, contractors, channel partners, etc.

#### **Additional Comments**

- There is typically a long sales cycle for these projects, followed by 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 appeared in 2012. The majority of the results are expected in 2013-2014, with a reduced benefit to cumulative energy savings targets.
- With the recent 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.
- Participant-estimated completion dates tend to be inaccurate and are usually 6 months longer. This could result in diminished savings toward target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. As there has been no defined administrative funding beyond 2014, many LDCs are 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.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

#### **2.2.2.5 Energy Audit Initiative**

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.
- Customer uptake was limited in 2011, however improved throughout 2012 especially with the new audit component for one system (i.e. 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 LDCs to recommend audit companies. A centralized prequalified list provided by the OPA would be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.
- CNPI feels this program is under-marketed by the OPA and under-utilized by channel partners, contractors, etc. For most customers, this is the first step to becoming aware of the systems, processes and/or machinery that can be retrofit or adjusted which would lead to participation in other CDM programs.

### 2.2.3 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.

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.

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

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this portfolio. While the expedited change management has benefited the 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 the Process & Systems Upgrades Initiative ("PSUI"). Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake although results may not be counted toward 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.

#### 2.2.3.1 *Process & Systems Upgrades Initiative (PSUI) (Schedule D-1)*

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.
- Offering services of Key Account Manager to under 5MW customers

##### **Additional Comments:**

- Approximately 100 engineering study applications have been submitted. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.

- There is typically a long sales cycle for these projects, and then a long project development cycle. As such, limited results are expected to be generated in 2012. The majority of the results are expected in 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- Delays with processing funding payments have caused delayed payments to Participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and Participant acknowledging that the Participant cannot be paid until the funds are received.
- 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.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. The small capital project agreement was finalized through change management in August 2013.
- 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 toward LDC targets due to in-service dates beyond 2014.

### **2.2.3.2 *Monitoring & Targeting Initiative (Schedule D-2)***

#### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.
- Offering services of Key Account Manager to under 5MW customers

#### **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, a limited number of 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.

### **2.2.3.3 *Energy Manager Initiative (Schedule D-3)***

#### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets

- Community Events
- Meetings with customers, contractors, channel partners, etc.
- Offering services of Key Account Manager to under 5MW customers

**Additional Comments:**

- The Energy Managers have proven to be a popular and useful resource for larger customers. There are approximately 70 Embedded Energy Managers (EEMs) and 25 Roving Energy Managers (REMs) being utilized by customers across the Province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire an REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and Customers 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.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish “credibility”. Energy Managers started filling their pipeline with projects but few projects were implemented in 2012.
- Delays with processing EEM payments have resulted in LDCs delaying payments to Participants beyond contract requirements.
- There have been a number of studies identified by Energy Managers and they have been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities.
- Requirement that 30% of target must come from Non-incented projects is identified as an issue for most REMs, although final targets not due to 2013. Working group has proposed to remove this requirement for REM’s only as they are not resident full time at a customer facility to find the non-incented savings.
- A decision on extending funding for EM’s is required in 2013 for this important Initiative, which should continue beyond 2014. Failing this, these expert resources will be lost in favour of full-time employment elsewhere.

**2.2.3.4 Key Account Manager (Schedule D-4)**

**Initiative Activities/Progress:**

- Program sell sheets
- Meetings with customers, contractors, channel partners, etc.
- Offering services of Key Account Manager (“KAM”) to under 5 MW customers

**Additional Comments**

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- Finding this type of skill set has been difficult. In addition, the short-term contract and associated energy targets discourage some skilled applicants, resulting in longer lead times to acquire the right resource.
- 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.



- A decision on extending funding for KAM's is required in 2013 for this important Initiative, which should continue beyond 2014. Failing this, these expert resources will be lost in favour of full-time employment elsewhere.
- CNPI has increased its utilization of the KAM they have been assigned in order to motivate customers by offering "spot the opportunities" site visits on individual basis. This has led to increased awareness of the many advantages of the other program offerings, and in some cases led to Demand Response 3 and ERII Retrofit applications.

#### **2.2.3.5 Demand Response 3 (D-6)**

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Meetings with customers, contractors, channel partners, etc.
- Offering services of Key Account Manager to under 5MW customers

##### **Additional Comments:**

- Until early 2013 customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs ability to effectively market to prospective participants and verify savings.
- No program improvements were made in 2012; however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators 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.

#### **2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM)**

##### **Initiative Activities/Progress:**

- Bi-annual customer newsletters
- CNPI website
- Program sell sheets
- Community Events
- Community Partner sessions

##### **Additional Comments:**

- 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.
- Due to issues with service provider offerings, and ability to cover CNPI's non-contiguous service territory, the program was not launched until 2013.

#### **2.2.5 PRE-2011 PROGRAMS**

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

### 3 2012 CNPI CDM Results

#### 3.1 Participation and Savings

Table 1:

Table 1: Canadian Niagara Power Inc. Initiative and Program Level Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2014		2014		2014		2014		2014		2014		2014	2014
<b>Consumer Program</b>															
Appliance Retirement	Appliances	219	97			13	6			93,881	36,455			19	490,786
Appliance Exchange	Appliances	67	38			6	6			7,024	9,653			7	52,706
HVAC Incentives	Equipment	323	284			94	64			173,523	111,564			158	1,028,784
Conservation Instant Coupon Booklet	Items	2,576	158			6	1			97,458	7,145			7	411,269
Bi-Annual Retailer Event	Items	4,447	5,421			9	8			150,171	136,655			16	1,011,250
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	0	0			0	0			0	0			0	0
Residential Demand Response (IHD)	Devices	0	0			0	0			0	0			0	0
Residential New Construction	Homes	0	0			0	0			0	0			0	0
<b>Consumer Program Total</b>						<b>128</b>	<b>84</b>			<b>522,058</b>	<b>303,672</b>			<b>207</b>	<b>2,994,795</b>
<b>Business Program</b>															
Retrofit	Projects	6	19			13	53			114,842	306,302			66	1,376,149
Direct Install Lighting	Projects	14	137			15	133			37,406	492,449			145	1,613,607
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	1			0	5			0	25,176			5	75,529
Small Commercial Demand Response	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	0	0			0	0			0	0			0	0
<b>Business Program Total</b>						<b>29</b>	<b>191</b>			<b>152,247</b>	<b>823,928</b>			<b>216</b>	<b>3,067,284</b>
<b>Industrial Program</b>															
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	0	0			0	0			0	0			0	0
Demand Response 3	Facilities	1	3			126	218			7,420	5,260			0	12,680
<b>Industrial Program Total</b>						<b>126</b>	<b>218</b>			<b>7,420</b>	<b>5,260</b>			<b>0</b>	<b>12,680</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	0	2			0	1			0	4,983			1	14,946
<b>Home Assistance Program Total</b>						<b>0</b>	<b>1</b>			<b>0</b>	<b>4,983</b>			<b>1</b>	<b>14,946</b>
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	32	0			240	0			1,232,526	0			240	4,930,103
High Performance New Construction	Projects	0	0			0	1			1,402	559			1	7,288
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
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>240</b>	<b>1</b>			<b>1,233,928</b>	<b>559</b>			<b>241</b>	<b>4,937,391</b>
<b>Other</b>															
Program Enabled Savings	Projects	0	0			0	0			0	0			0	0
Time-of-Use Savings	Homes														
<b>Other Total</b>														<b>0</b>	<b>0</b>
<b>Adjustments to Previous Year's Verified Results</b>															
Energy Efficiency Total						396	277			1,908,233	1,133,142			665	11,014,419
Demand Response Total (Scenario 1)						126	218			7,420	5,260			0	12,680
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>						<b>523</b>	<b>511</b>			<b>1,915,654</b>	<b>1,274,120</b>			<b>681</b>	<b>11,569,970</b>
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.												Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.			
												Full OEB Target:		6,400	25,080,000
												% of Full OEB Target Achieved to Date (Scenario 1):		10.6%	46.1%

**Table 2: Summarized Program Results**

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total			0.084	0.303	0.207	2.994
Business Program Total			0.191	0.823	0.216	3.067
Industrial Program Total			0.218	0.005	0.000	0.012
Home Assistance Program Total			0.001	.0049	0.001	0.014
Pre-2011 Programs completed in 2011 Total			0.001	.0005	0.241	4.937
Adjustments to 2011 Verified Results			0.016	0.135	0.016	0.542
<b>Total OPA Contracted Province-Wide CDM Programs</b>			<b>0.511</b>	<b>1.274</b>	<b>0.681</b>	<b>11.569</b>

GROSS SAVINGS WERE NOT AVAILABLE AT THE TIME OF THIS REPORT.

## 3.2 Evaluation

### Consumer Program

#### Bi-Annual Coupons

- 15% lower net savings due to a 15% lower net savings due to a change in the net-to gross factors (increased free-ridership, less participant behavior spillover, and less non-participant like spillover).
- Majority of participation, energy, & demand savings are from standard CFLs.
- 15% of net savings due to ~73,000 coupons for new LED measures

#### Annual Coupons

- The number of coupons associated with the redemption of 2012 Annual Coupons was 90% lower than 2011 Instant Coupon Booklet. Key factors for the decrease include:
  - Shorter duration of available coupons (September 2012 – December 2012)
  - In 2012, only online coupons were available
    - 2011 had both online coupons AND coupon mailing booklets.

#### HVAC

- Small decrease (10%) in per unit savings assumptions for furnace with ECM due to change in 2012 customer mix and furnace fan usage.
- Small increase (10%) in free-ridership related to the furnace with ECM measure.
- Participation remains relatively steady once 2011 true-up values are included.

#### Appliance Retirement

- Decrease in 2012 participation by 39% compared to 2011.
- In-site metering provided updated per unit assumptions:
  - Small decrease (3.5%) in savings for refrigerators; and
  - Sizeable increase (17.5%) in savings for freezers

#### Appliance Exchange

- Increase of 30% for exchanged dehumidifiers over 2011, leading to an increase of 4% in overall participation.
- Higher per unit savings for dehumidifiers drove the overall increase in 2012 savings.

#### Peaksaver PLUS

- Province-wide per-unit ex ante estimates for a 1-in-10 August peak day were determined to be 0.50 kW for residential CACs and 0.64 kW for small commercial CACs.
- Evaluation to date has indicated savings from in-home displays (IHDs) are not statistically significant (in and around zero).
  - However, since 2012 evaluation did not include full year analysis (specifically the summer months), these results have been deemed inconclusive.
- The IHD offer had a positive influence on enrollment and re-enrollment with between 20 to 35% of new enrollees said they wouldn't have enrolled without the IHD offer.

#### Residential New Construction

- All projects are opting for the prescriptive or performance path - there have been no custom project applications to date.

## **Business Programs**

### **Retrofit**

- Reported savings for prescriptive lighting projects continue to be overstated:
  - Verified wattage reductions were 15% higher than assumed; and
  - Verified operating hours were 11% higher than assumed.
- A lower realization rate in the engineered measure track can be partially explained by overstated lighting operation hour assumptions reported on the application.
- Net-to-gross ratios for the initiatives were above 75% in 2012, which is consistent with 2011.

### **Small Business Lighting**

- Reported hours of usage continue to be inaccurate - only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are resulting in participation from building types that may not fully operate during the summer peak period.
  - This trend contributes to lower realization rates for demand savings in 2012.
- Due to changing regulations in lighting measures, the assumed baseline technology will eventually be phased out. This regulation impacts the persistence of savings over the lifetime of lighting measures.

### **Existing Building Commissioning**

- There were no applications in 2012.
- Market feedback suggests that EBC's focus on chilled-water space-cooling systems may be too narrow, and participation could be expanded by incenting a wider range of measures.

### **New Construction**

- Custom projects account for 66% of program savings, with the remainder coming from the prescriptive track

### **Audit Funding Program**

- Through Audit Funding, 280 projects were completed in 2012 based on recommendations from the auditors, resulting in 1.4 MW and 7 GWh of Program Enabled Savings.
- Office buildings represented the largest portion of applicants for 2012.

## **Industrial Programs**

### **Process and Systems Upgrade Initiative**

- Energy managers are seen as important drivers of Program Enabled savings projects.
  - 88% of survey respondents indicated that the assistance provided by energy managers was "somewhat" or "very" important to implementing projects.
- Energy Managers indicated that additional support (additional training and guides) may further help influence the adoption of energy efficiency measures by the participants.
- Documentation for Program Enabled Savings projects varied substantially by LDC. More guidance on documentation requirements would be beneficial to all parties.

### **DR-3**

- 2012 saw improvements in the performance of DR-3 participants resulting higher ex ante realization rates, particularly for the industrial participants.

### **Home Assistance Program**

- Participation in the initiative ramped up in 2012, with over 5,000 homes participating in the initiative.
- Majority of energy savings (62%) comes from lighting measures, while 21% of energy savings resulting from refrigerator and freezer replacements.

### 3.3 Spending

**Table 3: 2012 Spending**

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
<b>Consumer Program</b>					
Appliance Retirement	11020.80				11020.80
Appliance Exchange	9052.57				9052.57
HVAC Incentives	12676.32				12676.32
Conservation Instant Coupon Booklet	9052.57				9052.57
Bi-Annual Retailer Event	10431.77				10431.77
Retailer Co-op					
Residential Demand Response	11012.60				11012.60
New Construction Program	9122.56				9122.56
<b>Business Program</b>					
Efficiency: Equipment Replacement	36950.75		15826.29		52777.04
Direct Installed Lighting	14960.16		103083.00		118043.16
Existing Building Commissioning Incentive	13979.60				13979.60
New Construction and Major Renovation Initiative	15679.60				15679.60

Energy Audit	15979.60				15979.60
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)					
<b>Industrial Program</b>					
Process & System Upgrades					
a) preliminary engineering study	1708.75				1708.75
b) detailed engineering study	1426.71				1426.71
c) program incentive	1426.71				1426.71
Monitoring & Targeting	1426.71				1426.71
Energy Manager	1426.71				1426.71
Key Account Manager ("KAM")	1463.07				1463.01
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3	2702.84				2702.84
<b>Home Assistance Program</b>					
Home Assistance Program	16547.37				16547.37
<b>Pre 2011 Programs</b>					
Electricity Retrofit Incentive Program			356530.55		356530.55
High Performance New Construction					



Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
<b>Initiatives Not In Market</b>					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)	<b>1292.13</b>				1292.13
Home Energy Audit Tool					
<b>TOTAL Province-wide CDM PROGRAMS</b>	<b>199339.90</b>		<b>475439.84</b>		<b>674779.74</b>

**Table 4: Cumulative Spending (2011-2014)**

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
<b>Consumer Program</b>					
Appliance Retirement	20640.93				20640.93
Appliance Exchange	9052.57				9052.57
HVAC Incentives	21433.45				21433.45
Conservation Instant Coupon Booklet	17881.34				17881.34
Bi-Annual Retailer Event	19188.90				19188.90
Retailer Co-op					
Residential Demand Response	20099.27				20099.27
New Construction Program	18196.81				18196.81
<b>Business Program</b>					
Efficiency: Equipment Replacement	63669.47		15826.29		79495.76
Direct Installed Lighting	28183.44		103083.00		131266.44
Existing Building Commissioning Incentive	27183.20				27183.20
New Construction and Major Renovation Initiative	29166.26				29166.26
Energy Audit	29215.45				29215.45
Small Commercial Demand Response (part of the Residential program schedule)					

Demand Response 3 (part of the Industrial program schedule)					
<b>Industrial Program</b>					
Process & System Upgrades					
a) preliminary engineering study	2916.16				2916.16
b) detailed engineering study	2605.59				2605.59
c) program incentive	2605.59				2605.59
Monitoring & Targeting	2708.09				2708.09
Energy Manager	2605.59				2605.59
Key Account Manager ("KAM")	2651.05				2651.05
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3	4764.33				4764.33
<b>Home Assistance Program</b>					
Home Assistance Program	16547.37				16547.37
<b>Pre 2011 Programs</b>					
Electricity Retrofit Incentive Program			356530.55		356530.55
High Performance New Construction					
Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					

EnWin Green Suites					
<b>Initiatives Not In Market</b>					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)	<b>1292.13</b>				1292.13
Home Energy Audit Tool					
<b>TOTAL Province-wide CDM PROGRAMS</b>	<b>342606.99</b>		<b>475439.84</b>		<b>818046.83</b>

### **3.4 Additional Comments**

When CNPI prepared its original CDM Strategy in 2010, estimates were based on previous program participation, and utilization of the OPA's "Resource Tool" program, for estimating program uptake and overall results. However, with only offering 3 CDM programs prior to 2011, it was unknown what these initiative assumptions and participation rates would produce in terms of target achievement.

With programs such as Direct Install Lighting and Appliance Retirement reaching market saturation, and CNPI not having participated in the Peaksaver program between 2008 and 2010, specific programs were targeted through the OPA Resource Tool program which indicated a potential achievement higher than anticipated participation, such as the Heating & Cooling Incentive, Demand Response 3 and the Peaksaver PLUS program.

## 4 Combined CDM Reporting Elements

### 4.1 Progress Toward 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	0.50	0.40	0.40	0.40
2012 – Verified by OPA		0.50	0.30	0.30
2013				
2014				
<b>Verified Net Annual Peak Demand Savings in 2014:</b>				<b>0.70</b>
<b>Canadian Niagara Power 2014 Annual CDM Capacity Target:</b>				<b>6.40</b>
<b>Verified Portion of Peak Demand Savings Target Achieved (%):</b>				<b>10.9%</b>

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	1.90	1.90	1.90	1.90	7.60
2012 – Verified by OPA		1.30	1.30	1.30	3.90
2013					
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					<b>11.50</b>
<b>Canadian Niagara Power 2011-2014 Cumulative CDM Energy Target:</b>					<b>25.08</b>
<b>Verified Portion of Cumulative Energy Target Achieved (%):</b>					<b>45.9%</b>

### 4.2 Outlook to 2014 and Strategy Modifications

As part of its 2010 CDM Strategy submitted to the OEB, CNPI forecasted energy and demand savings for each of the four years between 2011-2014. CNPI has not achieved the 2012 forecast of 1.49 MW by 12.40%. However, CNPI has exceeded the 2012 forecasted cumulative energy of 6.240 GWh target by 25.40%.

Several assumptions were made at the time forecasts were determined in November 2010.

- That all programs would be available and marketable January 1, 2011
- Historical customer participation as well as limited pre-2011 program participation by CNPI could be used to reasonably forecast the next four years. This included both customer participation as well as anticipated energy and demand savings.
- Implementation of initiatives would follow the design concepts.

When targets were originally set by the OEB, CNPI was in the final years of a ten-year lease of the distribution business of the City of Port Colborne (Port Colborne Hydro Inc.). After discussions with the OEB and OPA, it was determined that the targets would remain discreet for CNPI and Port Colborne with the Port Colborne targets being assigned to CNPI. The funding allocated to Port Colborne was then combined with the funding to CNPI and essentially one budget allocated to CNPI. In April 2012, CNPI completed the acquisition of the Port Colborne service territory and subsequently reporting its CDM targets as a single entity; CNPI.

Over the period of 2006 to 2011, CNPI's service territories has experienced negative to minimal population growth (averaging 1.6% overall) according to 2011 Statistics Canada Census data, compared to an overall growth rate of 5.5% for Canada. In addition, a significant reduction in large customer demand and energy consumption has occurred. There has been many customer closures, resulting in significant economic impacts affecting all communities especially so in the Town of Fort Erie. Due to the economic impacts still affecting the global economy, lack of growth and decline in the large customer base, the CNPI service territories have seen a material reduction in energy throughput and demand since 2008, which was the basis of the mandated CDM targets.

CNPI anticipates that these challenges will continue over the remaining two years of the mandated CDM initiative. This is also contingent on demand centric initiatives commencing and persisting to 2014 within all customer segments. The technology and potential stranded asset issues surrounding Peaksaver PLUS, and subsequent delay in program roll out to 2013, was not anticipated. CNPI is cautiously optimistic in meeting its energy target and will continue with its current strategy of engaging customers and promoting program awareness.

Our strategy coming out of 2012 is to revisit customers who had previously declined an opportunity to participate in conservation programs to reflect on the success of their peers. This strategy has increased awareness and uptake of the programs.

Another strategy has been a stronger presence in the community; participation in community events.

## **5 Conclusion**

Over the course of 2012, CNPI has achieved 0.7 MW in peak demand savings and 11.5 GWh in energy savings, which represents 10.9% and 45.9% of CNPI's 2014 target, respectively. These results are representative of a considerable effort expended by CNPI, in cooperation with other LDCs, customers, channel partners and stakeholders to more effectively deliver the programs under the established guidelines and administrative systems. The success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

The efforts in communication and community outreach have laid the groundwork for building upon these successes for the final two years.



## Appendix A: 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)



## **Appendix B: OPA Final Verified Annual 2012 CDM Report**





**Message from the Vice President:**

The OPA is pleased to provide you with the enclosed Final 2012 Results Report. We have seen a 39% increase in energy savings for our new province-wide 2011-2014 suite of saveONenergy initiatives. Overall progress to targets is moving up with 29% of demand and 65% of energy savings achieved. Many LDCs, both large and small, continue to stay on track to meet or exceed their OEB targets. Conservation programs continue to be a valuable and cost effective resource for customers across the province, over the past two years the program cost to consumers remains within 3 cents per kWh.

Further to programmatic savings, capability building efforts launched in 2011 are yielding healthy enabled savings through Embedded Energy Managers and Audit initiative projects. The strong momentum continues in 2013.

We remain committed to ensuring LDCs are successful in meeting their objectives and our collective efforts to date have improved the current program suite by offering more local program opportunities, implementing a new expedited change management process, and enhancing incentives to make it easier for customers to participate in programs. We invite you to continue to provide your feedback to us and to celebrate our successes as we move forward.

The format of this report was developed in collaboration with the OPA-LDC Reporting and Evaluation Working Group and is designed to help populate LDC annual report templates that will be submitted to the OEB in late September. All results are now considered final for 2012. Any additional 2012 program activity not captured will be reported in the Final 2013 Results Report.

Please continue to monitor saveONenergy E-blasts for any further updates and should you have any other questions or comments please contact [LDC.Support@powerauthority.on.ca](mailto:LDC.Support@powerauthority.on.ca).

We appreciate your ongoing collaboration and cooperation throughout the reporting and evaluation process. We look forward to another successful year.

Sincerely,

Andrew Pride



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## OPA-Contracted Province-Wide CDM Programs FINAL 2012 Results

**LDC:** Canadian Niagara Power Inc.

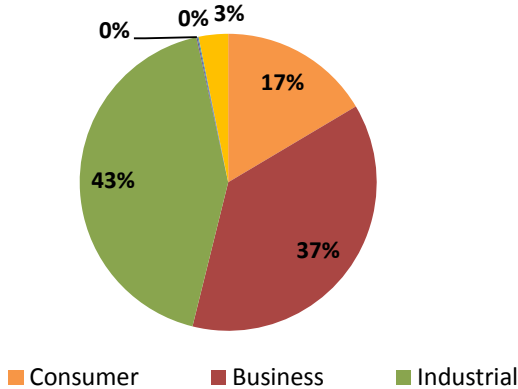
FINAL 2012 Progress to Targets	2012 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
<b>Net Annual Peak Demand Savings (MW)</b>	0.5	0.7	<b>10.6%</b>	<b>14.1%</b>
<b>Net Energy Savings (GWh)</b>	1.3	11.6	<b>46.1%</b>	<b>46.2%</b>

**Scenario 1** = Assumes that demand resource resources have a persistence of 1 year

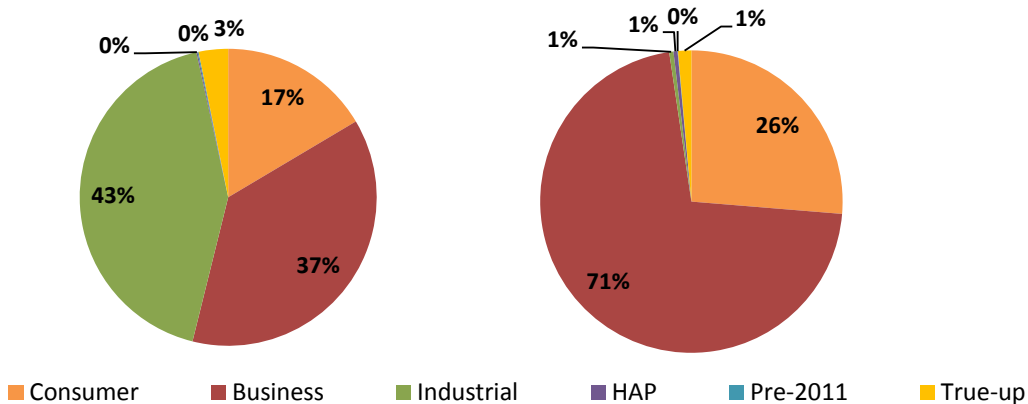
**Scenario 2** = Assumes that demand response resources remain in your territory until 2014

### Achievement by Sector

**2012 Incremental Peak Demand Savings (MW)**



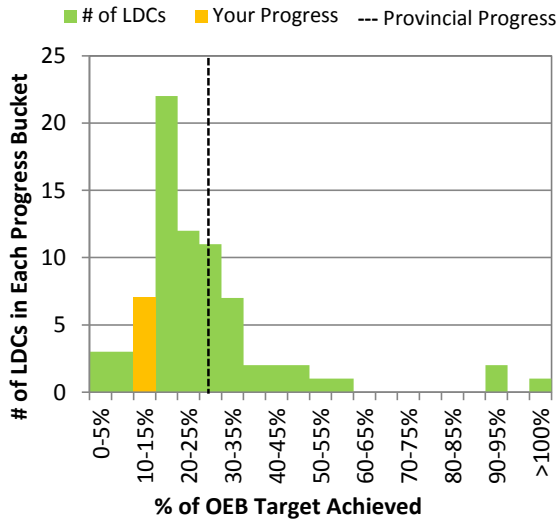
**2012 Incremental Energy Savings (GWh)**



### Comparison: Your Achievement vs. LDC Community Achievement (Progress to Target)

The following graphs assume that demand response resources remain in your territory until 2014 (aligns with Scenario 2)

**% of OEB Peak Demand Savings Target Achieved**



**% of OEB Energy Savings Target Achieved**

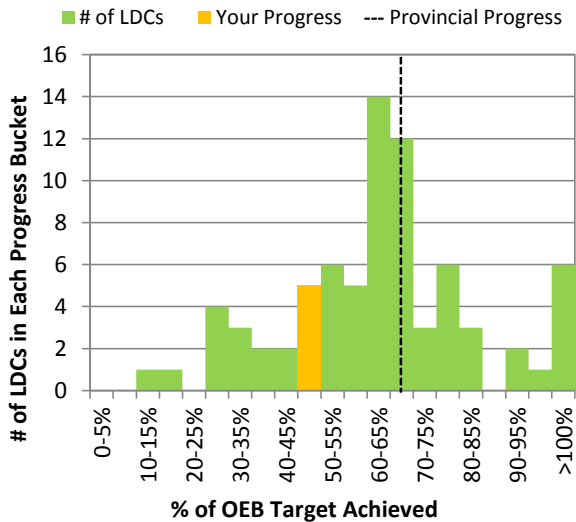




Table 1: Canadian Niagara Power Inc. Initiative and Program Level Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
<b>Consumer Program</b>															
Appliance Retirement	Appliances	219	97			13	6			93,881	38,455			19	490,786
Appliance Exchange	Appliances	67	38			6	6			7,024	9,653			7	52,706
HVAC Incentives	Equipment	323	284			94	64			173,523	111,564			158	1,028,784
Conservation Instant Coupon Booklet	Items	2,576	158			6	1			97,458	7,145			7	411,269
Bi-Annual Retailer Event	Items	4,447	5,421			9	8			150,171	136,855			16	1,011,250
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	0	0			0	0			0	0			0	0
Residential Demand Response (IHD)	Devices	0	0			0				0					
Residential New Construction	Homes	0	0			0	0			0	0			0	0
<b>Consumer Program Total</b>						<b>128</b>	<b>84</b>			<b>522,058</b>	<b>303,672</b>			<b>207</b>	<b>2,994,795</b>
<b>Business Program</b>															
Retrofit	Projects	8	19			13	53			114,842	306,302			66	1,378,149
Direct Install Lighting	Projects	14	137			15	133			37,406	492,449			145	1,613,607
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	1			0	5			0	25,176			5	75,529
Small Commercial Demand Response	Devices	0	0			0	0			0	0			0	0
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3	Facilities	0	0			0	0			0	0			0	0
<b>Business Program Total</b>						<b>29</b>	<b>191</b>			<b>152,247</b>	<b>823,928</b>			<b>216</b>	<b>3,067,284</b>
<b>Industrial Program</b>															
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	0				0				0				0	0
Demand Response 3	Facilities	1	3			126	218			7,420	5,260			0	12,680
<b>Industrial Program Total</b>						<b>126</b>	<b>218</b>			<b>7,420</b>	<b>5,260</b>			<b>0</b>	<b>12,680</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	0	2			0	1			0	4,983			1	14,948
<b>Home Assistance Program Total</b>						<b>0</b>	<b>1</b>			<b>0</b>	<b>4,983</b>			<b>1</b>	<b>14,948</b>
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	32	0			240	0			1,232,526	0			240	4,930,103
High Performance New Construction	Projects	0	0			0	1			1,402	559			1	7,288
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
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>240</b>	<b>1</b>			<b>1,233,928</b>	<b>559</b>			<b>241</b>	<b>4,937,391</b>
<b>Other</b>															
Program Enabled Savings	Projects	0	0			0	0			0	0			0	0
Time-of-Use Savings	Homes														
<b>Other Total</b>							<b>0</b>				<b>0</b>			<b>0</b>	<b>0</b>
<b>Adjustments to Previous Year's Verified Results</b>							<b>16</b>				<b>135,718</b>			<b>16</b>	<b>542,871</b>
<b>Energy Efficiency Total</b>						<b>396</b>	<b>277</b>			<b>1,908,233</b>	<b>1,133,142</b>			<b>665</b>	<b>11,014,419</b>
<b>Demand Response Total (Scenario 1)</b>						<b>126</b>	<b>218</b>			<b>7,420</b>	<b>5,260</b>			<b>0</b>	<b>12,680</b>
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>						<b>523</b>	<b>511</b>			<b>1,915,654</b>	<b>1,274,120</b>			<b>681</b>	<b>11,569,970</b>
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.												Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.			
												Full OEB Target:		<b>6,400</b>	<b>25,080,000</b>
												% of Full OEB Target Achieved to Date (Scenario 1):		<b>10.6%</b>	<b>46.1%</b>

Table 2: Adjustments to Canadian Niagara Power Inc. Verified Results due to Errors or Omissions (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
<b>Consumer Program</b>															
Appliance Retirement	Appliances	0				0				0				0	0
Appliance Exchange	Appliances	0				0				0				0	0
HVAC Incentives	Equipment	-55				-15				-27,905				-15	-111,622
Conservation Instant Coupon Booklet	Items	42				0				1,409				0	5,634
Bi-Annual Retailer Event	Items	418				1				11,157				1	44,629
Retailer Co-op	Items	0				0				0				0	0
Residential Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Residential Demand Response (IHD)	Devices	0				0				0				0	0
Residential New Construction	Homes	0				0				0				0	0
<b>Consumer Program Total</b>						<b>-15</b>				<b>-15,340</b>				<b>-15</b>	<b>-61,359</b>
<b>Business Program</b>															
Retrofit	Projects	0				0				0				0	0
Direct Install Lighting	Projects	0				0				0				0	0
Building Commissioning	Buildings	0				0				0				0	0
New Construction	Buildings	0				0				0				0	0
Energy Audit	Audits	6				31				151,058				31	604,230
Small Commercial Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Small Commercial Demand Response (IHD)	Devices	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
<b>Business Program Total</b>						<b>31</b>				<b>151,058</b>				<b>31</b>	<b>604,230</b>
<b>Industrial Program</b>															
Process & System Upgrades	Projects	0				0				0				0	0
Monitoring & Targeting	Projects	0				0				0				0	0
Energy Manager	Projects	0				0				0				0	0
Retrofit	Projects	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
<b>Industrial Program Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	0				0				0				0	0
<b>Home Assistance Program Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	0				0				0				0	0
High Performance New Construction	Projects	0				0				0				0	0
Toronto Comprehensive	Projects	0				0				0				0	0
Multifamily Energy Efficiency Rebates	Projects	0				0				0				0	0
LDC Custom Programs	Projects	0				0				0				0	0
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Other</b>															
Program Enabled Savings	Projects	0				0				0				0	0
Time-of-Use Savings	Homes														
<b>Other Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Adjustments to Previous Year's Verified Results</b>						<b>16</b>				<b>135,718</b>				<b>16</b>	<b>542,871</b>

\* 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.

**Table 3: Canadian Niagara Power Inc. Realization Rate & NTG**

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
<b>Consumer Program</b>																
Appliance Retirement		1.00				0.46				1.00				0.47		
Appliance Exchange		1.00				0.52				1.00				0.52		
HVAC Incentives		1.00				0.50				1.00				0.49		
Conservation Instant Coupon Booklet		1.00				1.00				1.00				1.05		
Bi-Annual Retailer Event		1.00				0.91				1.00				0.92		
Retailer Co-op		n/a				n/a				n/a				n/a		
Residential Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Residential Demand Response (IHD)		n/a				n/a				n/a				n/a		
Residential New Construction		n/a				n/a				n/a				n/a		
<b>Business Program</b>																
Retrofit		0.93				0.75				1.05				0.74		
Direct Install Lighting		0.69				0.94				0.85				0.94		
Building Commissioning		n/a				n/a				n/a				n/a		
New Construction		n/a				n/a				n/a				n/a		
Energy Audit		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (IHD)		n/a				n/a				n/a				n/a		
Demand Response 3*		n/a				n/a				n/a				n/a		
<b>Industrial Program</b>																
Process & System Upgrades		n/a				n/a				n/a				n/a		
Monitoring & Targeting		n/a				n/a				n/a				n/a		
Energy Manager		n/a				n/a				n/a				n/a		
Retrofit																
Demand Response 3*		n/a				n/a				n/a				n/a		
<b>Home Assistance Program</b>																
Home Assistance Program		0.98				1.00				0.99				1.00		
<b>Pre-2011 Programs completed in 2011</b>																
Electricity Retrofit Incentive Program		n/a				n/a				n/a				n/a		
High Performance New Construction		1.00				0.50				1.00				0.50		
Toronto Comprehensive		n/a				n/a				n/a				n/a		
Multifamily Energy Efficiency Rebates		n/a				n/a				n/a				n/a		
LDC Custom Programs		n/a				n/a				n/a				n/a		
<b>Other</b>																
Program Enabled Savings		n/a				n/a				n/a				n/a		
Time-of-Use Savings		n/a				n/a				n/a				n/a		

## Progress Towards CDM Targets

Results are attributed to target using current OPA reporting policies. Energy efficiency resources persist for the duration of the effective useful life. Any upcoming code changes are taken into account. Demand response resources persist for 1 year. Please see methodology tab for more detailed information.

**Table 4: Net Peak Demand Savings at the End User Level (MW)**

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.5	0.4	0.4	0.4
2012 - Verified		0.5	0.3	0.3
2013				
2014				
<b>Verified Net Annual Peak Demand Savings Persisting in 2014:</b>				<b>0.7</b>
<b>Canadian Niagara Power Inc. 2014 Annual CDM Capacity Target</b>				<b>6.4</b>
<b>Verified Portion of Peak Demand Savings Target Achieved in 2014(%):</b>				<b>10.6%</b>

**Table 5: 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	1.9	7.6
2012 - Verified		1.3	1.3	1.3	3.9
2013					
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					<b>11.6</b>
<b>Canadian Niagara Power Inc. 2011-2014 Annual CDM Energy Target</b>					<b>25.1</b>
<b>Verified Portion of Cumulative Energy Target Achieved (%):</b>					<b>46.1%</b>

\*2011 energy adjustments included in cumulative energy savings.

**Table 6: Province-Wide Initiatives and Program Level Savings by Year**

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
<b>Consumer Program</b>															
Appliance Retirement	Appliances	56,110	34,146			3,299	2,011			23,005,812	13,424,518			5,171	132,176,857
Appliance Exchange	Appliances	3,688	3,836			371	556			450,187	974,621			689	4,512,525
HVAC Incentives	Equipment	111,587	85,221			32,037	19,060			59,437,670	32,841,283			51,097	336,274,530
Conservation Instant Coupon Booklet	Items	559,462	30,891			1,344	230			21,211,537	1,398,202			1,575	89,040,754
Bi-Annual Retailer Event	Items	870,332	1,060,901			1,681	1,480			29,387,468	26,781,674			3,161	197,894,897
Retailer Co-op	Items	152	0			0	0			2,652	0			0	10,607
Residential Demand Response (switch/pstat)*	Devices	19,550	98,388			10,947	49,038			24,870	359,408			0	384,279
Residential Demand Response (IHD)	Devices	0	49,689			0				0					
Residential New Construction	Homes	7	19			0	2			743	17,152			2	54,430
<b>Consumer Program Total</b>						<b>49,681</b>	<b>72,377</b>			<b>133,520,941</b>	<b>75,796,859</b>			<b>61,696</b>	<b>760,348,879</b>
<b>Business Program</b>															
Retrofit	Projects	2,516	5,605			24,467	61,147			136,002,258	314,922,468			84,018	1,480,647,459
Direct Install Lighting	Projects	20,297	18,494			23,724	15,284			61,076,701	57,345,798			31,181	391,072,869
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	10	69			123	764			411,717	1,814,721			888	7,091,031
Energy Audit	Audits	103	280			0	1,450			0	7,049,351			1,450	21,148,054
Small Commercial Demand Response	Devices	132	294			84	187			157	1,068			0	1,224
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3*	Facilities	145	151			16,218	19,389			633,421	281,823			0	915,244
<b>Business Program Total</b>						<b>64,617</b>	<b>98,221</b>			<b>198,124,253</b>	<b>381,415,230</b>			<b>117,535</b>	<b>1,900,875,881</b>
<b>Industrial Program</b>															
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	39			0	1,086			0	7,372,108			1,086	22,116,324
Retrofit	Projects	433				4,615				28,866,840				4,613	115,462,282
Demand Response 3*	Facilities	124	185			52,484	74,056			3,080,737	1,784,712			0	4,865,449
<b>Industrial Program Total</b>						<b>57,098</b>	<b>75,141</b>			<b>31,947,577</b>	<b>9,156,820</b>			<b>5,699</b>	<b>142,444,054</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	46	5,033			2	566			39,283	5,442,232			569	16,483,831
<b>Home Assistance Program Total</b>						<b>2</b>	<b>566</b>			<b>39,283</b>	<b>5,442,232</b>			<b>569</b>	<b>16,483,831</b>
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	2,016	0			21,662	0			121,138,219	0			21,662	484,552,876
High Performance New Construction	Projects	145	69			5,098	3,251			26,185,591	11,901,944			8,349	140,448,197
Toronto Comprehensive	Projects	577	0			15,805	0			86,964,886	0			15,805	347,859,545
Multifamily Energy Efficiency Rebates	Projects	110	0			1,981	0			7,595,683	0			1,981	30,382,733
LDC Custom Programs	Projects	8	0			399	0			1,367,170	0			399	5,468,679
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>44,945</b>	<b>3,251</b>			<b>243,251,550</b>	<b>11,901,944</b>			<b>48,195</b>	<b>1,008,712,030</b>
<b>Other</b>															
Program Enabled Savings	Projects	0	16			0	2,304			0	1,188,362			2,304	3,565,086
Time-of-Use Savings	Homes														
<b>Other Total</b>							<b>2,304</b>				<b>1,188,362</b>			<b>2,304</b>	<b>3,565,086</b>
<b>Adjustments to Previous Year's Verified Results</b>							<b>1,406</b>				<b>18,689,081</b>			<b>1,156</b>	<b>73,918,598</b>
<b>Energy Efficiency Total</b>						<b>136,610</b>	<b>109,191</b>			<b>603,144,419</b>	<b>482,474,435</b>			<b>235,998</b>	<b>3,826,263,564</b>
<b>Demand Response Total (Scenario 1)</b>						<b>79,733</b>	<b>142,670</b>			<b>3,739,185</b>	<b>2,427,011</b>			<b>0</b>	<b>6,166,196</b>
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>						<b>216,343</b>	<b>253,267</b>			<b>606,883,604</b>	<b>503,590,526</b>			<b>237,154</b>	<b>3,906,348,358</b>
* 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.												Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.			
												<b>Full OEB Target:</b>		<b>1,330,000</b>	<b>6,000,000,000</b>
												<b>% of Full OEB Target Achieved to Date (Scenario 1):</b>		<b>17.8%</b>	<b>65.1%</b>

**Table 7: Adjustments to Province-Wide Verified Results due to Errors & Omissions (Scenario 1)**

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
<b>Consumer Program</b>															
Appliance Retirement	Appliances	0				0				0				0	0
Appliance Exchange	Appliances	0				0				0				0	0
HVAC Incentives	Equipment	-18,866				-5,278				-9,721,817				-5,278	-38,887,267
Conservation Instant Coupon Booklet	Items	8,216				16				275,655				16	1,102,621
Bi-Annual Retailer Event	Items	81,817				108				2,183,391				108	8,733,563
Retailer Co-op	Items	0				0				0				0	0
Residential Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Residential Demand Response (IHD)	Devices	0				0				0				0	0
Residential New Construction	Homes	19				1				13,767				1	55,069
<b>Consumer Program Total</b>						<b>-5,153</b>				<b>-7,249,004</b>				<b>-5,153</b>	<b>-28,996,015</b>
<b>Business Program</b>															
Retrofit	Projects	303				3,204				16,216,165				3,083	64,398,674
Direct Install Lighting	Projects	444				501				1,250,388				372	4,624,945
Building Commissioning	Buildings	0				0				0				0	0
New Construction	Buildings	12				828				3,520,620				828	14,082,482
Energy Audit	Audits	93				481				2,341,392				481	9,365,567
Small Commercial Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Small Commercial Demand Response (IHD)	Devices	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
<b>Business Program Total</b>						<b>5,014</b>				<b>23,328,565</b>				<b>4,764</b>	<b>92,471,668</b>
<b>Industrial Program</b>															
Process & System Upgrades	Projects	0				0				0				0	0
Monitoring & Targeting	Projects	0				0				0				0	0
Energy Manager	Projects	0				0				0				0	0
Retrofit	Projects	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
<b>Industrial Program Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	0				0				0				0	0
<b>Home Assistance Program Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	12				138				545,536				138	2,182,145
High Performance New Construction	Projects	34				1,407				2,065,200				1,407	8,260,800
Toronto Comprehensive	Projects	0				0				0				0	0
Multifamily Energy Efficiency Rebates	Projects	0				0				0				0	0
LDC Custom Programs	Projects	0				0				0				0	0
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>1,545</b>				<b>2,610,736</b>				<b>1,545</b>	<b>10,442,945</b>
<b>Other</b>															
Program Enabled Savings	Projects	0				0				0				0	0
Time-of-Use Savings	Homes														
<b>Other Total</b>						<b>0</b>				<b>0</b>				<b>0</b>	<b>0</b>
<b>Adjustments to Previous Year's Verified Results</b>						<b>1,406</b>				<b>18,690,297</b>				<b>1,156</b>	<b>73,918,598</b>

\* 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.

**Table 8: Province-Wide Realization Rate & NTG**

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
<b>Consumer Program</b>																
Appliance Retirement		1.00				0.46				1.00				0.47		
Appliance Exchange		1.00				0.52				1.00				0.52		
HVAC Incentives		1.00				0.50				1.00				0.49		
Conservation Instant Coupon Booklet		1.00				1.00				1.00				1.05		
Bi-Annual Retailer Event		1.00				0.91				1.00				0.92		
Retailer Co-op		n/a				n/a				n/a				n/a		
Residential Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Residential Demand Response (IHD)		n/a				n/a				n/a				n/a		
Residential New Construction		3.65				0.49				7.17				0.49		
<b>Business Program</b>																
Retrofit		0.93				0.75				1.05				0.76		
Direct Install Lighting		0.69				0.94				0.85				0.94		
Building Commissioning		n/a				n/a				n/a				n/a		
New Construction		0.98				0.49				0.99				0.49		
Energy Audit		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (IHD)		n/a				n/a				n/a				n/a		
Demand Response 3*		n/a				n/a				n/a				n/a		
<b>Industrial Program</b>																
Process & System Upgrades		n/a				n/a				n/a				n/a		
Monitoring & Targeting		n/a				n/a				n/a				n/a		
Energy Manager		1.16				0.90				1.16				0.90		
Retrofit																
Demand Response 3*		n/a				n/a				n/a				n/a		
<b>Home Assistance Program</b>																
Home Assistance Program		0.32				1.00				0.99				1.00		
<b>Pre-2011 Programs completed in 2011</b>																
Electricity Retrofit Incentive Program		n/a				n/a				n/a				n/a		
High Performance New Construction		1.00				0.50				1.00				0.50		
Toronto Comprehensive		n/a				n/a				n/a				n/a		
Multifamily Energy Efficiency Rebates		n/a				n/a				n/a				n/a		
LDC Custom Programs		n/a				n/a				n/a				n/a		
<b>Other</b>																
Program Enabled Savings		1.06				1.00				2.26				1.00		
Time-of-Use Savings		n/a				n/a				n/a				n/a		

## Summary - Provincial Progress

**Table 9: Province-Wide Net Peak Demand Savings at the End User Level (MW)**

Implementation Period	Annual			
	2011	2012	2013	2014
2011	216.3	136.6	135.8	129.0
2012		253.3	109.8	108.2
2013				
2014				
<b>Verified Net Annual Peak Demand Savings in 2014:</b>				<b>237.2</b>
<b>2014 Annual CDM Capacity Target</b>				<b>1,330</b>
<b>Verified Peak Demand Savings Target Achieved - 2011 (%):</b>				<b>17.8%</b>

**Table 10: Province-Wide Net Energy Savings at the End-User Level (GWh)**

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	606.9	603.0	601.0	582.3	2,393
2012		503.6	498.4	492.6	1,513
2013					
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					<b>3,906</b>
<b>2011-2014 Cumulative CDM Energy Target:</b>					<b>6,000</b>
<b>Verified Portion of Energy Target Achieved - 2011 (%):</b>					<b>65.1%</b>

\*2011 energy adjustments included in cumulative energy savings.



## METHODOLOGY

All results are at the end-user level (not including transmission and distribution losses)

EQUATIONS	
Prescriptive Measures and Projects	<p><b>Gross Savings</b> = Activity * Per Unit Assumption  <b>Net Savings</b> = 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)</p>
Engineered and Custom Projects	<p><b>Gross Savings</b> = Reported Savings * Realization Rate  <b>Net Savings</b> = 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)</p>
Demand Response	<p><b>Peak Demand: Gross Savings = Net Savings</b> = contracted MW at contributor level * Provincial contracted to ex ante ratio  <b>Energy: Gross Savings = Net Savings</b> = 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)</p>
Adjustments to Previous Year's Verified Results	<p>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.</p>

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Consumer Program</b>			
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.	<p><b>Peak demand and energy savings</b> 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.</p>
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.	<p><b>Peak demand and energy savings</b> 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.</p>
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.	<p><b>Peak demand and energy savings</b> 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.</p>
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 <i>peaksaver</i> PLUS™ participant agreement.	<p><b>Peak demand savings</b> are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. <b>Energy savings</b> 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 <b>persist</b> for only 1 year, reflecting that savings will only occur if the resource is activated.</p>

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.	<b>Peak demand and energy savings</b> 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.
<b>Business Program</b>			
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.	<b>Peak demand and energy savings</b> 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).
<b>Additional Note:</b> 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.	<b>Peak demand and energy savings</b> 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.	<b>Peak demand and energy savings</b> 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.	<b>Peak demand and energy savings</b> 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).
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.	<b>Peak demand and energy savings</b> 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 <b>peaksaver PLUS™</b> participant agreement.	<b>Peak demand savings</b> are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. <b>Energy savings</b> 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 <b>persist</b> 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.	<b>Peak demand savings</b> 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. <b>Energy savings</b> are based on an ex post estimate which reflects the savings that actually occurred as a results 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.
<b>Industrial Program</b>			
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.	<b>Peak demand and energy savings</b> 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.	<b>Peak demand and energy savings</b> 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.	<b>Peak demand and energy savings</b> 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
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	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.	<b>Peak demand and energy savings</b> 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).
Demand Response 3	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.	<b>Peak demand savings</b> 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. <b>Energy savings</b> are based on an ex post estimate which reflects the savings that actually occurred as a results 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.
<b>Home Assistance Program</b>			

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	<b>Peak demand and energy savings</b> are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
<b>Pre-2011 Programs completed in 2011</b>			
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation	Savings are considered to begin in the year in which a project was completed.	<b>Peak demand and energy savings</b> 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). <b>If energy savings are not available</b> , an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results ( <a href="http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports">http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports</a> ).
High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the OPA from Enbridge; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation	Savings are considered to begin in the year in which a project was completed.	
Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation		



Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation	Savings are considered to begin in the year in which a project was completed.	<p><b>Peak demand and energy savings</b> 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&amp;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). <b>If energy savings are not available</b>, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (<a href="http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports">http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports</a>).</p>
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation		
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation		

### ERII Sector (C&I vs. Industrial Mapping)

Building Type	Sector
Agribusiness - Cattle Farm	C&I
Agribusiness - Dairy Farm	C&I
Agribusiness - Greenhouse	C&I
Agribusiness - Other	C&I
Agribusiness - Other,Mixed-Use - Office/Retail	C&I
Agribusiness - Other,Office,Retail,Warehouse	C&I
Agribusiness - Other,Office,Warehouse	C&I
Agribusiness - Poultry	C&I
Agribusiness - Poultry,Hospitality - Motel	C&I
Agribusiness - Swine	C&I
Convenience Store	C&I
Education - College / Trade School	C&I
Education - College / Trade School,Multi-Residential - Condominium	C&I
Education - College / Trade School,Multi-Residential - Rental Apartment	C&I
Education - College / Trade School,Retail	C&I
Education - Primary School	C&I
Education - Primary School,Education - Secondary School	C&I
Education - Primary School,Multi-Residential - Rental Apartment	C&I
Education - Primary School,Not-for-Profit	C&I
Education - Secondary School	C&I
Education - University	C&I
Education - University,Office	C&I
Hospital/Healthcare - Clinic	C&I
Hospital/Healthcare - Clinic,Hospital/Healthcare - Long-term Care,Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Clinic,Industrial	C&I
Hospital/Healthcare - Clinic,Retail	C&I
Hospital/Healthcare - Long-term Care	C&I
Hospital/Healthcare - Long-term Care,Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Medical Building,Mixed-Use - Office/Retail	C&I
Hospital/Healthcare - Medical Building,Mixed-Use - Office/Retail,Office	C&I
Hospitality - Hotel	C&I
Hospitality - Hotel,Restaurant - Dining	C&I
Hospitality - Motel	C&I
Industrial	Industrial
Mixed-Use - Office/Retail	C&I
Mixed-Use - Office/Retail,Industrial	Industrial
Mixed-Use - Office/Retail,Mixed-Use - Other	C&I
Mixed-Use - Office/Retail,Mixed-Use - Other,Not-for-Profit,Warehouse	C&I
Mixed-Use - Office/Retail,Mixed-Use - Residential/Retail	C&I
Mixed-Use - Office/Retail,Office,Restaurant - Dining,Restaurant - Quick Serve,Retail,Warehouse	C&I

Mixed-Use - Office/Retail,Office,Warehouse	C&I
Mixed-Use - Office/Retail,Retail	C&I
Mixed-Use - Office/Retail,Warehouse	C&I
Mixed-Use - Office/Retail,Warehouse,Industrial	Industrial
Mixed-Use - Other	C&I
Mixed-Use - Other,Industrial	Industrial
Mixed-Use - Other,Not-for-Profit,Office	C&I
Mixed-Use - Other,Office	C&I
Mixed-Use - Other,Other: Please specify	C&I
Mixed-Use - Other,Retail,Warehouse	C&I
Mixed-Use - Other,Warehouse	C&I
Mixed-Use - Residential/Retail	C&I
Mixed-Use - Residential/Retail,Multi-Residential - Condominium	C&I
Mixed-Use - Residential/Retail,Multi-Residential - Rental Apartment	C&I
Mixed-Use - Residential/Retail,Retail	C&I
Multi-Residential - Condominium	C&I
Multi-Residential - Condominium,Multi-Residential - Rental Apartment	C&I
Multi-Residential - Condominium,Other: Please specify	C&I
Multi-Residential - Rental Apartment	C&I
Multi-Residential - Rental Apartment,Multi-Residential - Social Housing Provider,Not-for-Profit	C&I
Multi-Residential - Rental Apartment,Not-for-Profit	C&I
Multi-Residential - Rental Apartment,Warehouse	C&I
Multi-Residential - Social Housing Provider	C&I
Multi-Residential - Social Housing Provider,Industrial	C&I
Multi-Residential - Social Housing Provider,Not-for-Profit	C&I
Not-for-Profit	C&I
Not-for-Profit,Office	C&I
Not-for-Profit,Other: Please specify	C&I
Not-for-Profit,Warehouse	C&I
Office	C&I
Office,Industrial	Industrial
Office,Other: Please specify	C&I
Office,Other: Please specify,Warehouse	C&I
Office,Restaurant - Dining	C&I
Office,Restaurant - Dining,Industrial	Industrial
Office,Retail	C&I
Office,Retail,Industrial	C&I
Office,Retail,Warehouse	C&I
Office,Warehouse	C&I
Office,Warehouse,Industrial	Industrial
Other: Please specify	C&I
Other: Please specify,Industrial	Industrial
Other: Please specify,Retail	C&I
Other: Please specify,Warehouse	C&I
Restaurant - Dining	C&I
Restaurant - Dining,Retail	C&I

Restaurant - Quick Serve	C&I
Restaurant - Quick Serve,Retail	C&I
Retail	C&I
Retail,Industrial	Industrial
Retail,Warehouse	C&I
Warehouse	C&I
Warehouse,Industrial	Industrial

### Consumer Program Allocation Methodology

Results can be allocated based on average of 2008 & 2009 residential throughput for each LDC (below) when additional information is not available. Source: OEB Yearbook Data 2008 & 2009

Local Distribution Company	Allocation
Algoma Power Inc.	0.2%
Atikokan Hydro Inc.	0.0%
Attawapiskat Power Corporation	0.0%
Bluewater Power Distribution Corporation	0.6%
Brant County Power Inc.	0.2%
Brantford Power Inc.	0.7%
Burlington Hydro Inc.	1.4%
Cambridge and North Dumfries Hydro Inc.	1.0%
Canadian Niagara Power Inc.	0.5%
Centre Wellington Hydro Ltd.	0.1%
Chapleau Public Utilities Corporation	0.0%
COLLUS Power Corporation	0.3%
Cooperative Hydro Embrun Inc.	0.0%
E.L.K. Energy Inc.	0.2%
Enersource Hydro Mississauga Inc.	3.9%
ENTEGRUS	0.6%
ENWIN Utilities Ltd.	1.6%
Erie Thames Powerlines Corporation	0.4%
Espanola Regional Hydro Distribution Corporation	0.1%
Essex Powerlines Corporation	0.7%
Festival Hydro Inc.	0.3%
Fort Albany Power Corporation	0.0%
Fort Frances Power Corporation	0.1%
Greater Sudbury Hydro Inc.	1.0%
Grimsby Power Inc.	0.2%
Guelph Hydro Electric Systems Inc.	0.9%
Haldimand County Hydro Inc.	0.4%
Halton Hills Hydro Inc.	0.5%
Hearst Power Distribution Company Limited	0.1%
Horizon Utilities Corporation	4.0%
Hydro 2000 Inc.	0.0%
Hydro Hawkesbury Inc.	0.1%
Hydro One Brampton Networks Inc.	2.8%
Hydro One Networks Inc.	30.0%

Hydro Ottawa Limited	5.6%
Innisfil Hydro Distribution Systems Limited	0.4%
Kashechewan Power Corporation	0.0%
Kenora Hydro Electric Corporation Ltd.	0.1%
Kingston Hydro Corporation	0.5%
Kitchener-Wilmot Hydro Inc.	1.6%
Lakefront Utilities Inc.	0.2%
Lakeland Power Distribution Ltd.	0.2%
London Hydro Inc.	2.7%
Middlesex Power Distribution Corporation	0.1%
Midland Power Utility Corporation	0.1%
Milton Hydro Distribution Inc.	0.6%
Newmarket - Tay Power Distribution Ltd.	0.7%
Niagara Peninsula Energy Inc.	1.0%
Niagara-on-the-Lake Hydro Inc.	0.2%
Norfolk Power Distribution Inc.	0.3%
North Bay Hydro Distribution Limited	0.5%
Northern Ontario Wires Inc.	0.1%
Oakville Hydro Electricity Distribution Inc.	1.5%
Orangeville Hydro Limited	0.2%
Orillia Power Distribution Corporation	0.3%
Oshawa PUC Networks Inc.	1.2%
Ottawa River Power Corporation	0.2%
Parry Sound Power Corporation	0.1%
Peterborough Distribution Incorporated	0.7%
PowerStream Inc.	6.6%
PUC Distribution Inc.	0.9%
Renfrew Hydro Inc.	0.1%
Rideau St. Lawrence Distribution Inc.	0.1%
Sioux Lookout Hydro Inc.	0.1%
St. Thomas Energy Inc.	0.3%
Thunder Bay Hydro Electricity Distribution Inc.	0.9%
Tillsonburg Hydro Inc.	0.1%
Toronto Hydro-Electric System Limited	12.8%
Veridian Connections Inc.	2.4%
Wasaga Distribution Inc.	0.2%
Waterloo North Hydro Inc.	1.0%
Welland Hydro-Electric System Corp.	0.4%
Wellington North Power Inc.	0.1%
West Coast Huron Energy Inc.	0.1%
Westario Power Inc.	0.5%
Whitby Hydro Electric Corporation	0.9%
Woodstock Hydro Services Inc.	0.3%

## Reporting Glossary

**Annual:** the peak demand or energy savings that occur in a given year (includes resource savings from new program activity in a given year and resource savings persisting from previous years).

**Cumulative Energy Savings:** represents the sum of the annual energy savings that accrue over a defined period (in the context of this report the defined period is 2011 - 2014). This concept does not apply to peak demand savings.

**End-User Level:** resource savings in this report are measured at the customer level as opposed to the generator level (the difference being line losses).

**Free-ridership:** the percentage of participants who would have implemented the program measure or practice in the absence of the program.

**Incremental:** the new resource savings attributable to activity procured in a particular reporting period based on when the savings are considered to 'start' (please see table 5).

**Initiative:** a Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup).

**Net-to-Gross Ratio:** The ratio of net savings to gross savings, which takes into account factors such as free-ridership and spillover

**Net Energy Savings (MWh):** energy savings attributable to conservation and demand management activities net of free-riders, etc.

**Net Peak Demand Savings (MW):** peak demand savings attributable to conservation and demand management activities net of free-riders, etc.

**Program:** a group of initiatives that target a particular market sector (i.e. Consumer, Industrial).

**Realization Rate:** A comparison of observed or measured (evaluated) information to original reported savings which is used to adjust the gross savings estimates.

**Settlement Account:** the grouping of demand response facilities (contributors) into one contractual agreement

**Spillover:** Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover.

**Unit:** for a specific initiative the relevant type of activity acquired in the market place (i.e. appliances picked up, projects completed, coupons redeemed).