



**Grimsby Power Incorporated**

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September 30, 2014

Ontario Energy Board  
P.O. Box 2319  
27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, Ontario M4P 1E4  
Attention: Ms. Kirsten Walli, Board Secretary

**RE: Grimsby Power Incorporated (ED-2002-0554)  
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 Grimsby Power Inc.'s 2013 CDM Annual Report submission.

The Annual CDM Report outlines Grimsby Power Inc.'s activities in the promotion and delivery of Conservation initiatives under the provincial programs offered by the Ontario Power Authority.

If you have any questions regarding this submission, please contact myself.

Yours truly,

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**Conservation and Demand Management**  
**2013 Annual Report**

**Submitted to:**

**Ontario Energy Board**

**EB-2010-0215**

**Submitted on September 30, 2014**

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GRIMSBY POWER INC. 2013 CDM Annual Report

09/30/2014

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## EXECUTIVE SUMMARY

This annual report is submitted by Grimsby Power Inc. (“GPI”) 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 GPI’s CDM Strategy. Accordingly, this report outlines GPI’s CDM activities for the period of January 1, 2013 to December 31, 2013. It includes net peak demand and net energy savings achieved in 2011, 2012 and 2013, discussion of the current/future Conservation and Demand Management (“CDM”) framework, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

GPI did not apply for any Board-Approved CDM Programs during 2013; 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 GPI.

In 2011, GPI contracted with the Ontario Power Authority (OPA) to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments including Residential, Commercial and Institutional, Industrial and Low Income sectors. These programs were rolled-out by the OPA in early 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, GPI was active in promoting CDM programs. The utility was well represented at various community events, participated in conservation coupon promotions and purchased advertising in local newspaper publications. Mailing, telephone and visitation campaigns were run to promote all programs.

In 2013, GPI continued to be active in promoting the full slate of successful CDM programs to Grimsby customers. In addition, GPI began its *peaksaver* PLUS® program implementation, thereby improving demand savings in the residential sector.

GPI achieved 0.67 MW of net incremental peak demand savings representing 32.5% of target in 2013. In energy savings, GPI achieved 9.55 GWh or 123.1% of target in 2013. Both of these results are under Scenario 1, which assumes demand savings persist for only one year. The following table depicts GPI’s annual progress toward its targets:

**Table 1: GPI’s Annual Progress Toward its CDM Targets Under Scenario 1**

	<b>2011</b>	<b>2012</b>	<b>2013</b>
Net Annual Peak Demand Savings (Percent of Target achieved):	10.8%	21.7%	32.5%
Net Cumulative Energy Savings (Percent of Target achieved):	53.6%	91.6%	123.1%

The updated forecast prepared for this report (*shown in Section 5.1*) shows that GPI will likely achieve almost 10 GWh in energy savings by year-end 2014, which is well over the 7.76 GWh target.

The demand savings target of 2.06 MW may be achieved depending on the continued enthusiasm of Grimsby customers for the demand saving programs.

## **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 GPI's distribution license to require GPI, as a condition of its license, to achieve 7.76 GWh of energy savings and 2.06 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister's directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the Code) on September 16, 2010. The Code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, GPI submitted its CDM Strategy (EB-2010-0215) on November 1, 2010, which provided a high level description of how GPI intended to achieve its CDM targets. In response to a Board letter on November 29, 2010 which requested budgetary information to be included in the report, an amended CDM strategy was submitted on February 14, 2011.

The Code also requires a distributor to file annual reports with the Board. This is the third Annual Report by GPI and has been prepared in accordance with the Code requirement and covers the period from January 1, 2013 to December 31, 2013. Previous reports were submitted on September 28, 2012 covering the period January 1 to December 31, 2011, and on September 30, 2013 covering the period January 1 to December 31, 2012.

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (OPA) to proceed with a one-year extension of OPA Province-wide CDM programs to December 31, 2015. The Ministerial Directive did not amend the timelines for Local Distribution Companies ("LDCs") to achieve their energy savings and demand savings targets, nor did it specify further funding into 2015. The OPA is working with all LDCs to develop *Conservation First*, a comprehensive set of CDM programs for the 2015 – 2020 timeframe; however, the definition of targets and funding formulae are still in draft format as at the date of submission of this report. Therefore, the main focus of the LDCs remains the achievement of CDM targets by December 31, 2014 using the existing committed funding.

# 1 CONSERVATION FRAMEWORK

## 1.1 CURRENT FRAMEWORK

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

With just one Board-Approved CDM program and only a few viable Province-Wide OPA programs, the LDCs have limited opportunities to provide customers with significant energy and demand savings and to achieve their CDM targets. The process to expand or change the current program initiatives or to pilot new initiatives has been challenging, taking considerable cost and effort.

Prior to 2013, GPI had resisted the implementation of the *peaksaver* PLUS<sup>®</sup> program since shortcomings in the technology could have created major customer service issues. In mid-2013, a robust solution was developed to allow customer participation in the program while ensuring equipment installations would work reliably. From there, 23 successful installations were made in 2013.

## 1.2 FUTURE FRAMEWORK

LDCs are supportive of government's renewed commitment for conservation and demand management in Ontario. They are committed to working with the government and other stakeholders to develop the next framework for CDM in the Province. Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths.

Long-term and specific commitments for CDM funding to the LDCs are needed. This will allow LDCs to maintain current program infrastructure including LDC staff and third party contracts through 2015 and beyond. Otherwise, the CDM programs face a 'stop and start' pattern after which the infrastructure must be rebuilt.

Providing clarity and continuity into the next framework is critical for all customers. To ensure a seamless and smooth transition that maintains and builds upon CDM momentum beyond 2014, the new *Conservation First* CDM framework should be well defined and formally in place well before the expiry of the current one.

## **2 BOARD-APPROVED CDM PROGRAMS**

### **2.1 INTRODUCTION**

In its Decision and Order dated November 12 2010 (EB-2010-0215 & EB-2010-0216), the OEB ordered that, (to meet its mandatory CDM targets), “Each licensed electricity distributor must, as a condition of its license, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two”.

At this time, the implementation of Time-of-Use (TOU) Pricing is the only Board-Approved Conservation and Demand Management (CDM) program that is being offered in GPI’s service area.

### **2.2 TOU PRICING**

#### **2.2.1 BACKGROUND**

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

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. GPI will report these results upon receipt from the OPA. As of September 30, 2014, the OPA has not released any verified results of TOU savings to distributors. Therefore GPI is not able to provide any verified savings related to GPI’s TOU program at this time.



## 2.2.2 TOU PROGRAM DESCRIPTION

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

**Initiative Frequency:** Year-Round

**Objectives:** TOU pricing is designed to provide an incentive to consumers to shift energy usage to non-peak periods. Therefore peak demand reductions are expected, and energy conservation benefits may also be realized.

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

The RPP TOU price is adjusted twice annually by the OEB. An historical review of RPP TOU pricing is provided below:

**Table 2: Regulated Price Plan Time-of-Use Pricing: Historical Review**

<b>Electricity Commodity Rates under RPP TOU (cents/kWh)</b>			
<b>Effective Date</b>	<b>On Peak</b>	<b>Mid Peak</b>	<b>Off Peak</b>
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7
November 1, 2013	12.9	10.9	7.2
May 1, 2014	13.5	11.2	7.5

Source: <http://www.ontarioenergyboard.ca/OEB/Consumers/Electricity/Electricity%20Prices/Historical%20Electricity%20Prices>

**Delivery:** The OEB set rates. LDCs perform installation and maintenance of the meters. The LDCs convert customers to TOU billing.

**Initiative Activities/Progress:**

GPI began transitioning its RPP customers to TOU billing on May 1, 2012. As of December 31<sup>st</sup>, 2013, all RPP Residential and General Service Less Than 50 kW (“GS<50”) customers were converted to TOU billing. A total of 9,838 TOU meters were installed comprised of 9,218 residential and 620 GS<50 customer meters.

### **2.3 GPI’S APPLICATION WITH THE OEB**

GPI has no application with the OEB to provide Board-Approved CDM Programs. As mentioned above, the TOU program is the Board’s only approved CDM program and no application for it is required.

### 3 OPA-CONTRACTED PROVINCE-WIDE CDM PROGRAMS

#### 3.1 INTRODUCTION

Effective February 28, 2011, GPI entered into an agreement with the OPA to deliver CDM programs and initiatives extending from January 1, 2011 to December 31, 2014; these are listed below. Initiatives with strike-through lines were not registered and/or were not applicable for Grimsby:

**Table 3a: OPA-Contracted Province-Wide CDM Programs in Market - 2013**

<b>Initiative</b>	<b>Schedule</b>	<b>Date Schedule Posted</b>	<b>Customer Class</b>	<b>LDC In-Market Date<sup>(*)</sup></b>
<b>Residential Program</b>				
Appliance Retirement	Schedule B-1, Exhibit D	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Appliance Exchange	Schedule B-1, Exhibit E	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
HVAC Incentives	Schedule B-1, Exhibit B	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
<del>Retailer Co-op</del>	n/a	<i>n/a</i>	<i>All residential rate classes</i>	<i>n/a</i>
Residential Demand Response	Schedule B-3	<i>Feb 28, 2011</i>	<i>All residential service classes</i>	<i>April 1, 2013</i>
New Construction Program	Schedule B-2	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
<b>Commercial &amp; Institutional Program</b>				
Efficiency: Equipment Replacement	Schedule C-2	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>
Direct Install Lighting	Schedule C-3	<i>Feb 28, 2011</i>	<i>General Service &lt; 50 kW</i>	<i>Feb 28, 2011</i>
Existing Building Commissioning Incentive	Schedule C-5	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>
New Construction and Major Renovation Initiative	Schedule C-4	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>
Energy Audit	Schedule C-1	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>

<b>Initiative</b>	<b>Schedule</b>	<b>Date Schedule Posted</b>	<b>Customer Class</b>	<b>LDC In-Market Date<sup>(*)</sup></b>
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>April 1, 2013</i>
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
<b>Industrial Program</b>				
Process & System Upgrades	Schedule D-1	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
Monitoring & Targeting	Schedule D-2	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
Energy Manager	Schedule D-3	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
Key Account Manager ("KAM")	Schedule D-4	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
Demand Response 3	Schedule D-6	<i>Feb 28, 2011</i>	<i>General Service 50 kW &amp; above</i>	<i>Feb 28, 2011</i>
<b>Home Assistance Program</b>				
Home Assistance Program	Schedule E-1	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>July 1, 2012</i>
<b>Pre-2011 Programs</b>				
Electricity Retrofit Incentive Program	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
High Performance New Construction	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
Toronto Comprehensive	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
Multifamily Energy Efficiency Rebates	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
Data Centre Incentive Program	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
EnWin Green Suites	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>

*\* Many 2011-2014 initiatives are continuations or variations from earlier initiatives. An in-market date of Feb 28, 2011, when the agreement was signed, was used, unless they started later.*

As per the table below, several program initiatives are no longer available to customers or were not launched. The Aboriginal Conservation Program is not applicable to Grimsby Power's service area.

**Table 3b: OPA-Contracted Province-Wide CDM Programs Not In Market - 2013**

<b>Initiative Not in Market in 2013</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.	Never launched to market.
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 Master CDM Program Agreement includes program change management provisions in Article 3. Collaboration between the OPA and the LDCs on the program change management process began in 2011 and continued in 2012 and 2013 in an effort to further enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and

Initiative Schedules in order to give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the initiatives.

## 3.2 PROGRAM DESCRIPTIONS

Full OPA-Contracted Province-Wide CDM Program descriptions are available from the OPA and additional initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>. Each of the OPA-Contracted Province-Wide CDM Program initiatives is discussed below with reference to GPI's related activities in the local service area. Other reference details such as the targeted customer types, objectives, and individual descriptions for each Program Initiative are listed in Appendix A.

### 3.2.1 RESIDENTIAL PROGRAM

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

**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 Residential Program portfolio is predominately a carryover of initiatives from previous programs. However, the inclusion of LED technology into the Bi-annual Retailers events and the annual coupons in 2013 has had a positive effect on consumer engagement.

GPI focused primarily on the *peaksaver* PLUS®, Bi-Annual Retailer Event, Coupons and HVAC incentives initiatives to build CDM savings in the Residential program area in 2013. The revamped *peaksaver* PLUS® program was initiated in GPI's service territory in April 2013, and there was an excellent positive response from the community almost immediately. However, interest in the program waned by the fourth quarter, and year end results were dismal at best.

Work to revitalize and increase the effectiveness and breadth of Residential Program initiatives needs to be a high priority, since over 90% of customer accounts in Grimsby are residential. Coupon savings should be 100% attributable to the applicable utility. Opportunities within the Residential marketplace that may be considered include revised home energy audits and broader choices for recycling appliances and electronics.

### ***3.2.1.1 APPLIANCE RETIREMENT INITIATIVE (Exhibit D)***

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

For Grimsby, there were 32 old appliances removed from service in 2013, representing a net energy savings of 13,729 kWh for the year. The cumulative energy savings for this initiative were verified at 412,207 kWh. The 2013 count was significantly down from 96 units in 2012 and 165 units in 2011, supporting the view that the market is nearing saturation. New initiatives will be needed to encourage further homeowner savings in the appliance category. Marketing activity with respect to the program included handouts with specific information on the Appliance Retirement Initiative that were made available at all residential events including the Fifty Plus Friends Community Event, Grimsby Home Show, Festival at the Forty and spring and fall coupon events.

#### **Additional Comments:**

- With the increase in eligible appliance age from 15 to 20 years, the number of eligible participants diminished. This contributed to the much slower activity in 2013 than in previous years, despite a continuing marketing effort.
- Due to the duration of the program, 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 schedules, 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.
- As results are very responsive to province-wide advertising, OPA provincial marketing should continue to play a key role.
- The OPA and LDCs can continue working to establish partnerships with independent retailers and municipalities.

### ***3.2.1.2 APPLIANCE EXCHANGE INITIATIVE (Exhibit E)***

**Initiative Activities/Progress:** In Grimsby, 16 appliances were exchanged under the program in 2013, representing a net energy savings of 5,911 kWh for the year. By comparison, there were 12 exchanges in 2011 and 33 exchanges in 2012. The cumulative energy savings for this initiative were verified at 41,844 kWh. In 2013, the initiative only included dehumidifier units; window air conditioners were no longer accepted. This significantly detracted from the appeal of the initiative. GPI put posters up on display for walk-in customers at the GPI office to support OPA radio advertisements.

**Additional Comments:**

- While the appliance exchange event had included both window air conditioners and dehumidifier units, the air conditioners were essentially withdrawn from the eligible appliances for exchange in 2012 (*OPA E-Blast May 18, 2012*). This reduced the relevance of the program to Grimsby residents.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room air conditioners (“a/c”) was much lower than for dehumidifiers, so the program was diminished without a corresponding effort to expand the program by accepting other appliances (e.g. dishwashers, washer or dryer machines).
- 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.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.

### ***3.2.1.3 HVAC INCENTIVES INITIATIVE (Exhibit B)***

**Initiative Activities/Progress:** In Grimsby, there were 183 HVAC units replaced in 2013 under the program, representing a net energy savings of 66,991 kWh for the year. The cumulative energy savings for this initiative were verified at 882,178 kWh. This represents a 22% drop in participation from 2012, from 236 units. It also represents a 16% drop in kWh savings per year, from 79,836 kWh.

Marketing activity with respect to the program included handouts with specific information on the HVAC Incentive program that were made available at all residential events including the Fifty Plus Friends Community Event, Grimsby Home Show, Festival at the Forty and spring and fall coupon events.

**Additional Comments:**

- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to the end of its useful life. The introduction of an Air Miles incentive in 2013 failed to boost participation since customer decisions to replace HVAC equipment are generally not based on earning more Air Miles points.



- This initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and CAC sales to eligible units.
- Channel partners require timely rebate funding to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC.
- In an effort to build capacity, mandatory training has been imposed for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the lengthy application process already discourages contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province; however in 2013, only a total of 1,587 contractors completed the mandatory HVAC training and can participate in the program.
- 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, the energy savings from these installations are not credited to LDCs. The OPA should consider this in future program impact evaluation studies.

#### ***3.2.1.4 CONSERVATION INSTANT COUPON BOOKLET INITIATIVE (Exhibit A)***

**Initiative Activities/Progress:** In Grimsby, 791 coupons were redeemed in 2013 to acquire product discounts under this program, representing a net energy savings of 17,567 kWh for the year. This was a significant decline from 2011 when 1,155 coupons were used. The 2012 year was an anomaly; there were only 70 coupons attributed to Grimsby Power for the year since the annual coupons were unavailable to customers until September. The cumulative energy savings for this initiative to year-end 2013 were verified at 215,184 kWh.

GPI made a strong marketing effort to boost usage of the LDC specific coupons during the year. The coupons were posted on the website with promotional news items. GPI placed each of the custom coded coupons in the Grimsby Lincoln News as well as made the coupons available at all community events including: the Fifty Plus Friends Community Event, Grimsby Home Show, Spring and Fall Coupon events, Festival at the Forty and they were also made available at the GPI office.

#### **Additional Comments:**

- The time delay for retailer submission of redeemed coupons varied from retailer to retailer and in some cases was lengthy. The delays and incomplete results reporting limited the ability to react and respond to initiative performance or changes in consumer behavior.
- This initiative could benefit from provincial marketing as a substitute to mail-out distribution of coupons.
- The introduction of LED lighting coupons enhanced the uptake on this initiative.

- 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 made more distinct from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon initiatives, should be a regular activity to ensure continued consumer interest.

### ***3.2.1.5 BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)***

**Initiative Activities/Progress:** In Grimsby, consumers redeemed 2,153 coupons in 2013 to acquire product discounts under this program, representing a net energy savings of 39,156 kWh for the year. Of note, the savings in 2013 were 36% lower than in 2012. The cumulative energy savings for this initiative were verified at 529,353 kWh.

GPI was active in promoting the bi-annual event, setting up booths at the Canadian Tire store for both Spring and Fall as well as promoting them on the website and GPI offices. Newspaper ads were placed two weeks prior to each in-store event in addition to OPA radio ads.

#### **Additional Comments:**

- This initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- Limited engagement by local retailers has restricted the savings potential of this initiative.
- The product list has changed very little over the past four years. 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 made more distinct 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.

### **3.2.1.6 RETAILER CO-OP**

**Initiative Activities/Progress:** There was no participation in this initiative by Grimsby Power. GPI does not have staff resources available to effectively implement this initiative.

**Additional Comments:**

- This initiative is designed for LDCs with extensive resources to extend or create CDM initiatives and establish retailer relationships around them
- This initiative was not among the list of initiatives signed by GPI in the 2011 – 2014 CDM Program Registration

### **3.2.1.7 RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)**

**Initiative Activities/Progress:** GPI launched the *peaksaver* PLUS® program for Grimsby in April 2013 using the *efergy* solution; there was no *peaksaver* PLUS® program in place in 2012. Each installation involves installing a new Honeywell thermostat that permits the homeowner's participation in demand reduction events, and applying a small reader/transmitter to the meter that can be read by the customer's In-Home Display unit ("IHD") device. This initiative received an early positive response from the community; there were 23 installations completed in 2013. However, there were almost no demand or energy savings attributed to GPI as a result. This may change pending an updated evaluation by the OPA.

**Additional Comments:**

- Technology issues were the main barrier to implementing this initiative in 2012. GPI decided not to install the *Blue Collar* solution in 2012, which was the only available technology at the time to comply with the program. It was plagued with reliability issues and could have been problematic for customer service. It would quickly have become obsolete as well.
- Smart Meters installed by most LDCs did not have the capability to communicate directly to any of the IHDs on the market. When proposing technical initiatives that rely on existing LDC hardware or technology, there should be an extensive consultative process between the OPA and LDCs.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for product analysis and assessment, procurement, testing and integration into the Smart Meter environment would have made the launch of this initiative more effective.
- This is the main initiative within the Residential portfolio that drives demand savings for LDCs. Despite a great deal of effort in launching and marketing this program, there were almost no savings attributed to GPI for the initiative.
- 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.

### **3.2.1.8 NEW CONSTRUCTION PROGRAM (Schedule B-2)**

**Initiative Activities/Progress:** In Grimsby, none of the homebuilders completed the application under this program in 2013.

**Additional Comments:**

- This initiative provides incentives to home builders to incorporate energy efficiency into their buildings. To support this, builders need training to adopt energy-saving building options into their designs. Consumers need training to find those builders who do adopt the energy-saving practices.
- The incentive currently goes to the builder, not the homeowner. If the incentive went to the homeowner, then there would be greater motivation for homeowners to select trained builders.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback.
- The application process has been streamlined since inception; however it continues to be too cumbersome for builders. This combined with limited returns has resulted in this Initiative continuing to under-achieve.

### **3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM**

**Description:** Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs were designed to help fund energy audits, to replace energy-wasting equipment and to support new construction projects that exceed existing codes and standards. Businesses may 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 business owners and operators in achieving demand and energy savings, and to facilitate a culture of conservation in the business community as well as in the supply chains which serve them.

**Discussion:**

Throughout 2011 to 2013, the Commercial and Institutional (C&I) Working Group strived to enhance the existing C&I programs and rectify identified program and system deficiencies. This proved to be a challenging undertaking. Overbuilt governance, numerous initiative requirements, a complex program structure and a lengthy change management process restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) did not achieve transparency in their CDM net savings calculations. LDCs are held accountable for these results yet are almost completely removed from the process.

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 industry and consumers.

### ***3.2.2.1 EQUIPMENT REPLACEMENT INCENTIVE INITIATIVE (ERII)- "RETROFIT" INITIATIVE (Schedule C-2)***

**Initiative Activities/Progress:** In Grimsby, there were 20 Retrofit projects completed in 2013, up from 10 in 2012. This produced a net energy savings of 882,771 kWh for the year. The cumulative energy savings for this initiative were verified at 3,803,196 kWh.

Marketing Initiatives included:

- Contractor visits and facility audits of local Grimsby businesses
- Promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby
- Telephone solicitation for participation
- Website postings
- Promotional material made available at local events such as Grimsby Home Show, Mayors Event & Breakfast and the OPA Niagara Regional Symposium

#### **Additional Comments:**

- Over 70% of GPI energy savings were attributed to the Retrofit program in 2013. This program provides the highest average savings per project ratio and is a main focus of CDM marketing activity.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically motor-related retrofit measures.
- Streamlining of the settlements system has resulted in a significant improvement in the payment process in 2013.
- This initiative is limited by the state of the economy and the ability of commercial/institutional facilities to complete capital upgrades.
- 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, 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.

- 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.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.
- There is redundancy in the application process as customers may need to complete a worksheet and then enter most of that information over to the online application form. This can be cumbersome.
- Processing Head Office applications became much easier for the Lead LDC after Schedule changes came into effect in August 2013. The changes implemented allow the Lead LDC to review and approve all facilities in a Head Office application on behalf of all satellite LDCs under certain circumstances.
- While the Ministerial Directive provides for continuity of the conservation programs for the participant, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. For the Retrofit initiative in particular, this would be unfortunate. The establishment of defined administrative funding for 2015 is required to avoid an expensive “stop and start” process.

### ***3.2.2.2 DIRECT INSTALL INITIATIVE (DIL) (Schedule C-3)***

**Initiative Activities/Progress:** The Direct Install program has met with considerable success in Grimsby. There were an additional 46 applications completed in 2013 representing net energy savings of 187,835 kWh for the year. This compares favorably to previous years: 25 in 2011, and 49 in 2012. The 2013 year-end cumulative energy savings for this initiative were verified at 1,045,865 kWh.

Marketing activities included:

- Contractor visits and facility audits of local Grimsby businesses
- Telephone solicitation for participation
- Direct mail-outs to all remaining eligible businesses
- Website postings
- Community newspaper advertising
- Promotional material made available at local events such as Grimsby Home Show, Mayors Event & Breakfast, OPA Niagara Regional Symposium

**Additional Comments:**

- Many local small businesses have recognized the benefits of participating in this program, and Grimsby Power has focused on meeting the demand for it. An advantage to consumers is the relatively quick turn-around in payment.
- Increasing the incentive envelope from \$1,000 to \$1,500 in late 2012 (*Dec 4, 2012*) ensured the ongoing marketability of the program; a review of the eligible measure price list provided support for contractor participation.
- LED lighting was introduced in 2013 as a new measure and has been well received by customers who may not have previously qualified for DIL eligible upgrades. This is an efficient product with a long estimated useful life.
- 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 would be a big advantage. They already have an understanding of the initiative and its benefits, and would be more likely to participate than other business prospects.
- Successful execution of the previous rendition of this initiative (i.e. *Power Savings Blitz*) has resulted in diminished potential for the 2011-2014 initiative in Grimsby. The market is nearing saturation since Grimsby's business base is relatively small.
- Electrical contractor's margins have been reduced due to flat labour rates, increased costs for materials, greater distances between retrofits, and more door knocking required for each successful sale. This has led to a reduction in vendor channel participation in the Grimsby area.

**3.2.2.3 EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE**  
**(Schedule C-6)**

**Initiative Activities/Progress:** There has been no uptake for this initiative in Grimsby. Marketing activities included promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby.

**Additional Comments:**

- Grimsby has very few large business consumers as potential target applicants for this initiative.
- Participation is mainly channel partner driven; however there were too many barriers in the particulars of the initiative for many channel partners to participate, most notably the limitation of eligible measures to space cooling systems.

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

**Initiative Activities/Progress:** There has been no uptake for this initiative in Grimsby. Marketing activities included:

- Promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby
- Sell sheets specific to HPNC were made available at various events

**Additional Comments:**

- There is typically a long sales cycle for these projects, and then a long project development cycle.
- With the Ministerial Directive, facility projects that have a completion date near the end of 2014 may now be more secure for funding than previously.
- Participants' estimated completion dates tend to be inaccurate and are usually six months longer.
- The custom application process requires considerable customer support and skilled LDC staff. As administrative funding beyond 2014 is still under review, many LDCs are unsure how these project applications will be finalized.
- The cost and effort required to participate through the custom stream exceeds the value of the incentive for many customers.

### ***3.2.2.5 ENERGY AUDIT INITIATIVE (Schedule C-1)***

**Initiative Activities/Progress:** There were no Energy Audits performed for Grimsby customers in 2013. There were just two Energy Audits conducted in 2012, representing a net energy savings of 50,353 kWh. The cumulative energy savings for this initiative remains verified at 151,058 kWh.

Marketing Initiatives included promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby.

**Additional Comments:**

- The energy audit initiative is considered an 'enabling' initiative and 'feeds into' other saveONenergy initiatives. Despite this, there are low 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 and including a section recommending further enhancements 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 the other initiatives. This initiative should be evaluated for additional customer participation when presented with a new scope of work.

### **3.2.3 INDUSTRIAL PROGRAM**

**Description:** Large facilities are discovering the benefits of energy efficiency through the Industrial Program initiatives which are designed to help identify and promote energy saving opportunities. They include 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. They allow facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

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

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

**Discussion:**

Grimsby has a very limited industrial base, and no Large-Use rate class customers. CDM savings in this program have been limited to the DR-3 initiative.

The Industrial Program portfolio has been able to provide valuable resources to large facilities such as Energy Managers in enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for customers to complete comprehensive analyses of energy intensive processes that they would not otherwise be able to undertake. Energy Managers are skilled individuals whose only role is to assist customers with conservation initiatives. To date these Energy Managers have played a key role provincially in customer participation.

Due to the size, scope and long lead time of these initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however, the subsequent savings beyond 2014 would not be attributed to any LDC target.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of 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. A decision to proceed with natural gas load displacement generation projects may increase uptake, although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking ahead, there is minimal opportunity to make additional valuable changes to the current program suite and have these changes reflected in LDC 2014 results.

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

**Initiative Activities/Progress:** There has been no uptake for this initiative in Grimsby. There is a limited industrial base in the municipality.

**Additional Comments:**

- The PSUI program targets large customers who are undertaking major capital projects. There is typically a long sales cycle to sell these projects, and then a long project development cycle. As such, provincial results from PSUI did not appear until 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- This initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- 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 document with less onerous conditions on the customer.

### ***3.2.3.2 MONITORING & TARGETING INITIATIVE (Schedule D-2)***

**Initiative Activities/Progress:** There has been no uptake for this initiative in Grimsby.

**Additional Comments:**

- The Monitoring and Targeting ("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, who could establish guidelines for installing an effective M&T system. This has been a barrier for some customers. As such, a limited number of applications have been received to date in the province.
- The savings target required for this initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes were made to the Retrofit initiative to allow smaller facilities to employ M&T systems.

### ***3.2.3.3 ENERGY MANAGER INITIATIVE (Schedule D-3)***

**Initiative Activities/Progress:** Grimsby does not have any Large-use consumers for which this initiative was designed, so there was no uptake for it.

**Additional Comments:**

- The Energy Managers have proven to be a popular and useful resource for larger customers.
- 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 themselves with facilities, staff and time to establish “credibility”.

### ***3.2.3.4 KEY ACCOUNT MANAGER (KAM) (Schedule D-4)***

**Initiative Activities/Progress:** Grimsby does not have any Large-use consumers for which this initiative was designed, so there was no uptake for it.

**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 discourages some skilled applicants resulting in longer lead times to acquire the right resource.

### ***3.2.3.5 DEMAND RESPONSE 3 (Schedule D-6)***

**Initiative Activities/Progress:** There are three participants in the DR-3 program in Grimsby, providing in 2013 a net demand savings of 361 kW and an energy savings benefit of 7,505 kWh. The cumulative energy savings for this initiative were verified at 31,262 kWh. These are administered by the OPA and do not directly involve the LDC.

**Additional Comments:**

- No program improvements were made in 2013; however, it was accepted that prior participants who renew their DR-3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators were able to enter into contracts beyond 2014 which has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.

- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue.

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

**Initiative Activities/Progress:** In 2013, there was no uptake for this initiative in Grimsby - this despite considerable effort made to find eligible applicants.

Marketing Initiatives included:

- Promoting the program at a booth at the Grimsby Home Show in February 2013
- Promoting the program at a booth at the Fifty Plus Friends Community Event in April 2013
- Distributing brochures to a social worker and the Grimsby Benevolent Fund
- Preparing and mailing letters and brochures to 21 LEAP participants and following up on responses

**Additional Comments:**

- There is considerable difficulty identifying eligible customers.
- The process for building support from social service agencies was complicated and time consuming.
- 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 since LDCs do not have the same expertise that an agency would have to identify low income eligible customers.

### ***3.2.5 PRE-2011 PROGRAMS***

There were no energy or demand savings generated from this program sector in 2013 for GPI. The net cumulative energy savings to year end 2013 for this program were verified at 2,488,339 kWh. The targeted customer types, objectives and descriptions of these programs are detailed in Appendix B. There was no marketing effort assigned to this program in 2013 since all projects were completed in early 2012.

## **4 2013 CDM RESULTS**

### **4.1 PARTICIPATION AND SAVINGS**

GPI focused in 2013 on building on the most successful initiatives for the Grimsby service area: Retrofits, Direct Lighting, the HVAC Initiative, the Instant Coupon Initiative and the Bi-Annual Retailer Events. The results reflected this focused effort with strong participation in these areas, as noted in *Table 4* below:

Table 4: Participation Levels for OPA-Contracted Province-Wide CDM Programs 2011 to 2013 for Grimsby

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)			
		2011*	2012*	2013	2014
<b>Consumer Program</b>					
Appliance Retirement	Appliances	165	96	32	
Appliance Exchange	Appliances	12	33	16	
HVAC Incentives	Equipment	231	236	183	
Conservation Instant Coupon Booklet	Items	1,155	70	791	
Bi-Annual Retailer Event	Items	2,170	2,418	2,153	
Retailer Co-op	Items	0	0	0	
Residential Demand Response	Devices	0	0	23	
Residential Demand Response (IHD)	Devices	0	0	23	
Residential New Construction	Homes	0	0	0	
<b>Consumer Program Total</b>					
<b>Business Program</b>					
Retrofit	Projects	1	10	20	
Direct Install Lighting	Projects	25	49	46	
Building Commissioning	Buildings	0	0	0	
New Construction	Buildings	0	0	0	
Energy Audit	Audits	0	2	0	
Small Commercial Demand Response	Devices	0	0	0	
Small Commercial Demand Response (IHD)	Devices	0	0	0	
Demand Response 3	Facilities	1	1	1	
<b>Business Program Total</b>					
<b>Industrial Program</b>					
Process & System Upgrades	Projects	0	0	0	
Monitoring & Targeting	Projects	0	0	0	
Energy Manager	Projects	0	0	0	
Retrofit	Projects	0	0	0	
Demand Response 3	Facilities	1	2	2	
<b>Industrial Program Total</b>					
<b>Home Assistance Program</b>					
Home Assistance Program	Homes	0	0	0	
<b>Home Assistance Program Total</b>					
<b>Aboriginal Program</b>					
Home Assistance Program	Homes	0	0	0	
Direct Install Lighting	Projects	0	0	0	
<b>Aboriginal Program Total</b>					
<b>Pre-2011 Programs completed in 2011</b>					
Electricity Retrofit Incentive Program	Projects	6	0	0	
High Performance New Construction	Projects	1	0	0	
Toronto Comprehensive	Projects	0	0	0	
Multifamily Energy Efficiency Rebates	Projects	0	0	0	
LDC Custom Programs	Projects	0	0	0	
<b>Pre-2011 Programs completed in 2011 Total</b>					
<b>Other</b>					
Program Enabled Savings	Projects	0	0	0	
Time-of-Use Savings	Homes	0	0	0	
<b>Other Total</b>					
<b>Adjustments to 2011 Verified Results</b>					
<b>Adjustments to 2012 Verified Results</b>					
<b>Energy Efficiency Total</b>					
<b>Demand Response Total (Scenario 1)</b>					
<b>Adjustments to Previous Years' Verified Results Total</b>					
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>					
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).		The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations;			

In 2013, GPI achieved **123.1%** of its Net Cumulative Energy Savings target, and **50.5%** of its Net Annual Peak Demand Savings target. This placed GPI in the top 20 LDCs in terms of both Demand and Energy Savings.

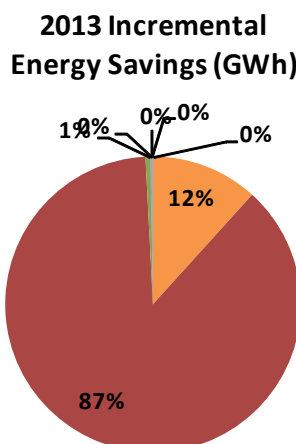
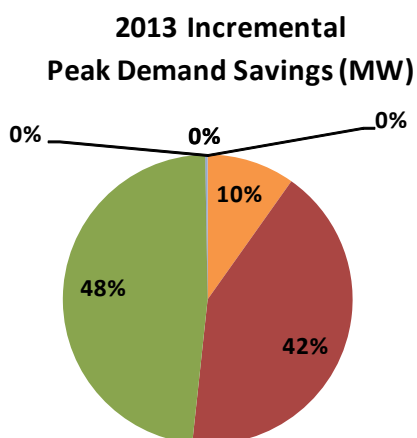
These results were based on the assumption that existing demand resources remain in place until 2014 (*Scenario 2*). If they do not, this would not change the Net Cumulative Energy Savings. However, the Net Annual Peak Demand Savings achievement would change to 32.5% (*per Table 5 below*).

**Table 5: OPA-Contracted Province-Wide CDM Programs Final Verified 2013 Results for GPI**

OPA-Contracted Province-Wide CDM Programs Final Verified 2013 Results				
LDC: Grimsby Power Inc.				
FINAL 2013 Progress to Targets	2013 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)	0.6	0.7	32.5%	50.5%
Net Energy Savings (GWh)	1.2	9.6	123.1%	123.1%

Scenario 1 = Assumes that demand response resources have a persistence of 1 year  
 Scenario 2 = Assumes that demand response resources remain in the LDC service territory until 2014

**Achievement by Sector**

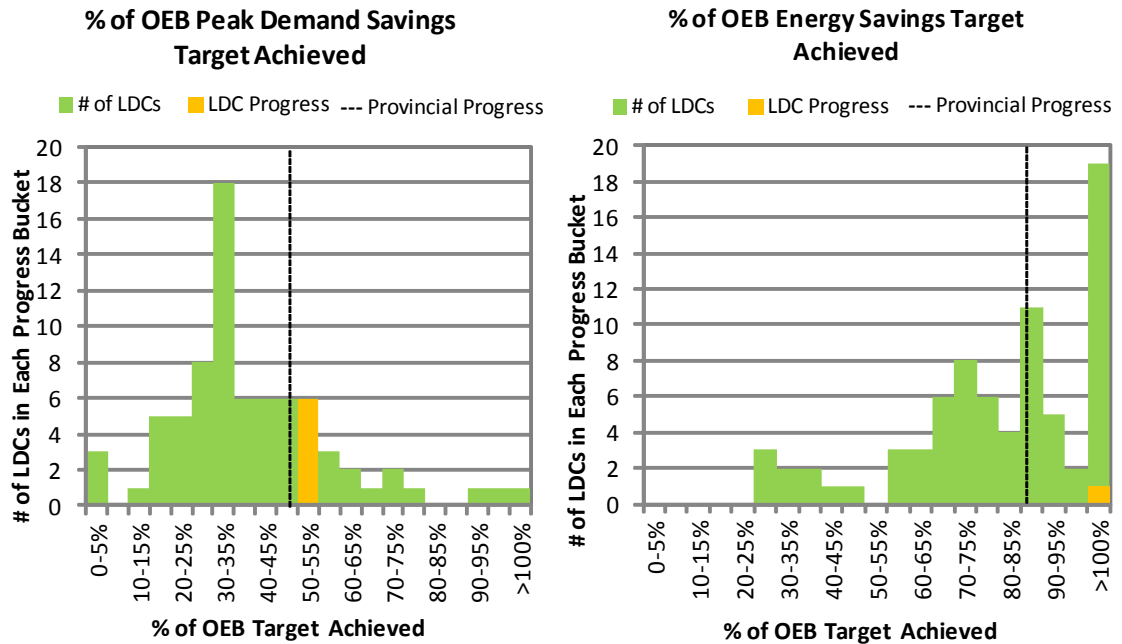


Consumer Business Industrial HAP ACP Program Enabled Other\*

\*Other includes adjustments to previous years' results and savings from pre-2011 initiatives

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

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



The following table provides a summary of Incremental Gross-to-Net CDM Savings by Program for 2013 for GPI. The Gross to Net ratios for the Consumer and Business program sectors negatively impacted savings significantly; however, the impact of Industrial sector Gross to Net ratios was nil:

**Table 6: Summary of Grimsby Power Incremental Gross-to-Net CDM Savings by Program in 2013**

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)	Program-to-Date: Net Cumulative Energy Savings (GWh)
Consumer Program Total	0.10	0.23	0.06	0.14	0.20	2.08
Business Program Total	0.29	1.33	0.25	1.07	0.37	5.01
Industrial Program Total	0.29	0.01	0.29	0.01	0.00	0.03
Home Assistance Program Total	0.00	0.00	0.00	0.00	0.00	0.00
Pre-2011 Programs Total	0.00	0.00	0.00	0.00	0.11	2.49
Adjustments from 2011	0.00	0.01	0.00	0.00	(0.01)	(0.05)
<b>Total OPA Contracted Province-Wide CDM Programs</b>	<b>0.68</b>	<b>1.58</b>	<b>0.59</b>	<b>1.22</b>	<b>0.67</b>	<b>9.55</b>



## 4.2 EVALUATION FINDINGS

### 4.2.1 GPI EVALUATION RESULTS

The most successful of the 2013 initiatives for GPI were the Retrofit and Direct Install Lighting initiatives. These achieved 1,070,606 kWh in Net Incremental Savings for 2013, representing 87.4% of the total. Other successful programs were the HVAC, Bi-Annual Retail Event and Conservation Instant Coupon initiatives. These contributed a combined incremental net savings of 123,714 kWh, representing 10.1% of the total.

While CDM savings from Pre-2011 programs were an important component of the 2011 CDM report, they provided no savings in 2013.

Shown below are the final EM&V results of the 2013 CDM program initiatives for GPI, depicting Net Demand and Energy savings by initiative, both incremental per year and cumulative for the 2011-2014 period. The Demand savings data shown assume that those savings will persist only one year.

- *Table 7a* provides insight into the participation levels, demand and energy savings by initiative for 2013
- *Table 7b* shows corrections that were made in prior years to verified results as a result of errors and omissions. The corrections were incorporated into 2013 results in the line labeled, 'Adjustments to Previous Years' Verified Results Total' in *Table 7a*.
- *Table 7c* shows Realization Rates and Net-to-Gross Ratios used for each initiative to calculate Net Savings. These are incorporated in the results shown in *Table 7a*.

Table 7a: Grimsby Power Inc. Participation, Demand and Energy Savings in OPA-Contracted Province-Wide CDM Initiatives

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)		
<b>Consumer Program</b>																	
Appliance Retirement	Appliances	165	96	32		10	6	2		67,826	37,883	13,729		17	412,207		
Appliance Exchange	Appliances	12	33	16		1	5	3		1,179	8,696	5,911		8	41,844		
HVAC Incentives	Equipment	231	236	183		72	48	39		127,173	79,836	66,991		158	882,178		
Conservation Instant Coupon Booklet	Items	1,155	70	791		3	1	1		42,622	3,187	17,567		4	215,184		
Bi-Annual Retailer Event	Items	2,170	2,418	2,153		4	3	3		66,980	61,041	39,156		10	529,353		
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0		
Residential Demand Response	Devices	0	0	23		0	0	10		0	0	1		0	1		
Residential Demand Response (IHD)	Devices	0	0	23		0	0	0		0	0	0		0	0		
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0		
<b>Consumer Program Total</b>						<b>89</b>	<b>62</b>	<b>58</b>		<b>305,780</b>	<b>190,642</b>	<b>143,355</b>		<b>198</b>	<b>2,080,768</b>		
<b>Business Program</b>																	
Retrofit	Projects	1	10	20		0	129	120		33,992	633,896	882,771		249	3,803,196		
Direct Install Lighting	Projects	25	49	46		32	34	52		79,312	123,968	187,835		111	1,045,865		
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0		
New Construction	Buildings	0	0	0		0	0	0		0	0	0		0	0		
Energy Audit	Audits	0	2	0		0	10	0		0	50,353	0		10	151,058		
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0		
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0		
Demand Response 3	Facilities	1	1	1		75	75	76		2,932	1,095	1,020		0	5,046		
<b>Business Program Total</b>						<b>107</b>	<b>249</b>	<b>249</b>		<b>116,235</b>	<b>809,311</b>	<b>1,071,626</b>		<b>370</b>	<b>5,005,165</b>		
<b>Industrial Program</b>																	
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		0	0		
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0		
Energy Manager	Projects	0	0	0		0	0	0		0	0	0		0	0		
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0		
Demand Response 3	Facilities	1	2	2		211	306	285		12,367	7,364	6,485		0	26,216		
<b>Industrial Program Total</b>						<b>211</b>	<b>306</b>	<b>285</b>		<b>12,367</b>	<b>7,364</b>	<b>6,485</b>		<b>0</b>	<b>26,216</b>		
<b>Home Assistance Program</b>																	
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0		
<b>Home Assistance Program Total</b>						<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		
<b>Aboriginal Program</b>																	
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0		
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0		
<b>Aboriginal Program Total</b>						<b>0</b>	<b>0</b>	<b>0</b>		<b>0</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	6	0	0		88	0	0		511,483	0	0		88	2,045,934		
High Performance New Construction	Projects	1	0	0		21	0	0		110,414	250	0		22	442,405		
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0		
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0		
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>110</b>	<b>0</b>	<b>0</b>		<b>621,898</b>	<b>250</b>	<b>0</b>		<b>110</b>	<b>2,488,339</b>		
<b>Other</b>																	
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0		
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0		
<b>Other Total</b>						<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>		
<b>Adjustments to 2011 Verified Results</b>																	
<b>Adjustments to 2012 Verified Results</b>																	
<b>Energy Efficiency Total</b>						<b>230</b>	<b>236</b>	<b>220</b>		<b>1,040,981</b>	<b>999,108</b>	<b>1,213,960</b>		<b>678</b>	<b>9,569,225</b>		
<b>Demand Response Total (Scenario 1)</b>						<b>286</b>	<b>381</b>	<b>371</b>		<b>15,299</b>	<b>8,458</b>	<b>7,506</b>		<b>0</b>	<b>31,263</b>		
<b>Adjustments to Previous Years' Verified Results Total</b>						<b>0</b>	<b>-11</b>	<b>2</b>		<b>0</b>	<b>-14,631</b>	<b>3,475</b>		<b>-9</b>	<b>-48,101</b>		
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>						<b>516</b>	<b>606</b>	<b>593</b>		<b>1,056,280</b>	<b>992,936</b>	<b>1,224,940</b>		<b>669</b>	<b>9,552,388</b>		
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).												Full OEB Target:		<b>2,060</b>	<b>7,760,000</b>		
*Includes adjustments after Final Reports were issued												The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.		% of Full OEB Target Achieved to Date (Scenario 1):		<b>32.5%</b>	<b>123.1%</b>
Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated																	

Table 7b: Adjustments to Grimsby Power Inc. Prior Years Verified Results due to Errors or Omissions – Included in Table 7a

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)			
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
<b>Consumer Program</b>													
Appliance Retirement	Appliances	0	0			0	0			0	0		
Appliance Exchange	Appliances	0	0			0	0			0	0		
HVAC Incentives	Equipment	-43	7			-11	1			-19,861	2,587		
Conservation Instant Coupon Booklet	Items	19	0			0	0			628	0		
Bi-Annual Retailer Event	Items	186	0			0	0			4,976	0		
Retailer Co-op	Items	0	0			0	0			0	0		
Residential Demand Response	Devices	0	0			0	0			0	0		
Residential Demand Response (IHD)	Devices	0	0			0	0			0	0		
Residential New Construction	Homes	0	0			0	0			0	0		
<b>Consumer Program Total</b>						<b>-11</b>	<b>1</b>			<b>-14,256</b>	<b>2,587</b>		
<b>Business Program</b>													
Retrofit	Projects	0	0			0	0			0	0		
Direct Install Lighting	Projects	0	1			0	0			0	888		
Building Commissioning	Buildings	0	0			0	0			0	0		
New Construction	Buildings	0	0			0	0			0	0		
Energy Audit	Audits	0	0			0	0			0	0		
Small Commercial Demand Response	Devices	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		
<b>Business Program Total</b>						<b>0</b>	<b>0</b>			<b>0</b>	<b>888</b>		
<b>Industrial Program</b>													
Process & System Upgrades	Projects	0	0			0	0			0	0		
Monitoring & Targeting	Projects	0	0			0	0			0	0		
Energy Manager	Projects	0	0			0	0			0	0		
Retrofit	Projects	0	0			0	0			0	0		
Demand Response 3	Facilities	0	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	0		
<b>Home Assistance Program Total</b>						<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>		
<b>Aboriginal Program</b>													
Home Assistance Program	Homes	0	0			0	0			0	0		
Direct Install Lighting	Projects	0	0			0	0			0	0		
<b>Aboriginal 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	0		
High Performance New Construction	Projects	0	0			0	0			-375	0		
Toronto Comprehensive	Projects	0	0			0	0			0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0		
LDC Custom Programs	Projects	0	0			0	0			0	0		
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>0</b>	<b>0</b>			<b>-375</b>	<b>0</b>		
<b>Other</b>													
Program Enabled Savings	Projects	0	0			0	0			0	0		
Time-of-Use Savings	Homes	0	0			0	0			0	0		
<b>Other Total</b>						<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>		
<b>Adjustments to 2011 Verified Results</b>						<b>-11</b>				<b>-14,631</b>			
<b>Adjustments to 2012 Verified Results</b>							<b>2</b>				<b>3,475</b>		
<b>Total Adjustments to Previous Years' Verified Results</b>						<b>-11</b>	<b>2</b>			<b>-14,631</b>	<b>3,475</b>		

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

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above does not consider persistence of savings

Table 7c: Grimsby Power Inc. Realization Rates and Net-to-Gross Ratios by Initiative (As used in Table 7a to determine Net Savings)

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	1.00	n/a		0.50	0.46	0.42		1.00	1.00	n/a		0.51	0.47	0.44	
Appliance Exchange	1.00	1.00	1.00		0.52	0.52	0.53		1.00	1.00	1.00		0.52	0.52	0.53	
HVAC Incentives	1.00	1.00	n/a		0.61	0.50	0.48		1.00	1.00	n/a		0.60	0.49	0.48	
Conservation Instant Coupon Booklet	1.00	1.00	1.00		1.14	1.00	1.11		1.00	1.00	1.00		1.11	1.05	1.13	
Bi-Annual Retailer Event	1.00	1.00	1.00		1.13	0.91	1.04		1.00	1.00	1.00		1.10	0.92	1.04	
Retailer Co-op	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential New Construction	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Business Program</b>																
Retrofit	n/a	1.00	0.91		n/a	0.78	0.76		n/a	1.24	1.13		n/a	0.81	0.78	
Direct Install Lighting	1.08	0.68	0.81		0.93	0.94	0.94		0.90	0.85	0.84		0.93	0.94	0.94	
Building Commissioning	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
New Construction	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Energy Audit	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Small Commercial Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Small Commercial Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Demand Response 3	0.76	n/a	n/a		n/a	n/a	n/a		1.00	n/a	n/a		n/a	n/a	n/a	
<b>Industrial Program</b>																
Process & System Upgrades	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Monitoring & Targeting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Energy Manager	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Retrofit																
Demand Response 3	0.84	n/a	n/a		n/a	n/a	n/a		1.00	n/a	n/a		n/a	n/a	n/a	
<b>Home Assistance Program</b>																
Home Assistance Program	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Aboriginal Program</b>																
Home Assistance Program	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Direct Install Lighting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Pre-2011 Programs completed in 2011</b>																
Electricity Retrofit Incentive Program	0.77	n/a	n/a		0.52	n/a	n/a		0.77	n/a	n/a		0.52	n/a	n/a	
High Performance New Construction	1.00	1.00	1.00		0.50	0.50	0.50		1.00	1.00	1.00		0.50	0.50	0.50	
Toronto Comprehensive	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Multifamily Energy Efficiency Rebates	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
LDC Custom Programs	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Other</b>																
Program Enabled Savings	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Time-of-Use Savings	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	

#### **4.2.2 OPA PROVINCE-WIDE EVALUATION FINDINGS**

The province achieved **27.0%** of the demand savings target of 1,330 MW by the end of 2013. In addition, they achieved **85.7%** of the cumulative energy savings target of 6,000 GWh in 2013 (*Scenario 1*). Cumulatively, Retrofits made up the highest proportion of savings for the demand and energy measures, 39.8% for demand and 42.2% for energy. The HVAC incentive was second in terms of demand savings, comprising 19.7% of the total. The Direct Install Lighting initiative was second in terms of the energy savings measure, comprising 10.1% of the total actual energy savings in 2013.

The following tables depict the verified 2013 CDM savings realized by the Province.

- *Table 8a* provides insight into the participation levels, demand and energy savings by initiative for 2013
- *Table 8b* shows corrections that were made to prior year verified results as a result of errors and omissions. The corrections were incorporated into 2013 results in the line labeled, 'Adjustments to Previous Years' Verified Results Total' in *Table 8a*.
- *Table 8c* shows Realization Rates and Net-to-Gross Ratios used by Initiative to calculate Net Savings. These are incorporated in the results shown in *Table 8a*.

**Table 8a: 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	2014
<b>Consumer Program</b>															
Appliance Retirement	Appliances	56,110	34,146	20,952		3,299	2,011	1,433		23,005,812	13,424,518	8,713,107		6,605	149,603,072
Appliance Exchange	Appliances	3,688	3,836	5,337		371	556	1,106		450,187	974,621	1,971,701		1,795	8,455,927
HVAC Incentives	Equipment	92,743	87,427	91,581		32,037	19,060	19,552		59,437,670	32,841,283	33,923,592		70,650	404,121,713
Conservation Instant Coupon Booklet	Items	567,678	30,891	346,896		1,344	230	517		21,211,537	1,398,202	7,707,573		2,091	104,455,900
Bi-Annual Retailer Event	Items	952,149	1,060,901	944,772		1,681	1,480	1,184		29,387,468	26,781,674	17,179,841		4,345	232,254,579
Retailer Co-op	Items	152	0	0		0	0	0		2,652	0	0		0	10,607
Residential Demand Response	Devices	19,550	98,388	171,733		10,947	49,038	93,076		24,870	359,408	390,303		0	774,582
Residential Demand Response (IHD)	Devices	0	49,689	133,657		0	0	0		0	0	0		0	0
Residential New Construction	Homes	26	19	86		0	2	18		743	17,152	165,690		20	381,811
<b>Consumer Program Total</b>															
						49,681	72,377	116,886		133,520,941	75,796,859	70,049,807		85,506	900,058,189
<b>Business Program</b>															
Retrofit	Projects	2,819	6,134	8,785		24,467	61,147	59,678		136,002,258	314,922,468	345,346,008		142,831	2,168,497,702
Direct Install Lighting	Projects	20,741	18,691	17,782		23,724	15,284	18,708		61,076,701	57,345,798	64,315,558		49,886	519,693,356
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	22	69	86		123	764	1,584		411,717	1,814,721	4,959,266		2,472	17,009,564
Energy Audit	Audits	198	345	319		0	1,450	2,811		0	7,049,351	15,455,795		4,261	52,059,644
Small Commercial Demand Response	Devices	132	294	1,211		84	187	773		157	1,068	373		0	1,597
Small Commercial Demand Response (IHD)	Devices	0	0	378		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	145	151	175		16,218	19,389	23,706		633,421	281,823	346,659		0	1,261,903
<b>Business Program Total</b>															
						64,617	98,221	107,261		198,124,253	381,415,230	430,423,659		199,449	2,758,523,766
<b>Industrial Program</b>															
Process & System Upgrades	Projects	0	0	3		0	0	294		0	0	2,603,764		294	5,207,528
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	42	205		0	1,086	3,558		0	7,372,108	21,994,263		3,194	54,888,570
Retrofit	Projects	433	0	0		4,615	0	0		28,866,840	0	0		4,613	115,462,282
Demand Response 3	Facilities	124	185	281		52,484	74,056	162,543		3,080,737	1,784,712	4,309,160		0	9,174,609
<b>Industrial Program Total</b>															
						57,098	75,141	166,395		31,947,577	9,156,820	28,907,187		8,101	184,732,989
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	46	5,033	26,756		2	566	2,361		39,283	5,442,232	20,987,275		2,904	57,949,913
<b>Home Assistance Program Total</b>															
						2	566	2,361		39,283	5,442,232	20,987,275		2,904	57,949,913
<b>Aboriginal Program</b>															
Home Assistance Program	Homes	0	0	584		0	0	267		0	0	1,609,393		267	3,218,786
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
<b>Aboriginal Program Total</b>															
						0	0	267		0	0	1,609,393		267	3,218,786
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	2,028	0	0		21,662	0	0		121,138,219	0	0		21,662	484,552,876
High Performance New Construction	Projects	179	69	4		5,098	3,251	772		26,185,591	11,901,944	3,522,240		9,121	147,492,677
Toronto Comprehensive	Projects	577	0	0		15,805	0	0		86,964,886	0	0		15,805	347,859,545
Multifamily Energy Efficiency Rebates	Projects	110	0	0		1,981	0	0		7,595,683	0	0		1,981	30,382,733
LDC Custom Programs	Projects	8	0	0		399	0	0		1,367,170	0	0		399	5,468,679
<b>Pre-2011 Programs completed in 2011 Total</b>															
						44,945	3,251	772		243,251,550	11,901,944	3,522,240		48,967	1,015,756,510
<b>Other</b>															
Program Enabled Savings	Projects	14	56	13		0	2,304	3,692		0	1,188,362	4,075,382		5,996	11,715,850
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
<b>Other Total</b>															
						0	2,304	3,692		0	1,188,362	4,075,382		5,996	11,715,850
<b>Adjustments to 2011 Verified Results</b>								1,406	641					1,797	80,864,121
<b>Adjustments to 2012 Verified Results</b>									6,260					6,180	126,287,857
<b>Energy Efficiency Total</b>						136,610	109,191	117,536		603,144,419	482,474,435	554,528,447		351,190	4,920,743,312
<b>Demand Response Total (Scenario 1)</b>						79,733	142,670	280,099		3,739,185	2,427,011	5,046,495		0	11,212,691
<b>Adjustments to Previous Years' Verified Results Total</b>						0	1,406	6,901		0	18,689,081	43,684,221		7,976	207,151,978
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>						216,343	253,267	404,536		606,883,604	503,590,526	603,259,163		359,166	5,139,107,980
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).						The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.									
												<b>Full OEB Target:</b>		1,330,000	6,000,000,000
												<b>% of Full OEB Target Achieved to Date (Scenario 1):</b>		27.0%	85.7%
*Includes adjustments after Final Reports were issued						Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated									

Table 8b: Adjustments to Province-Wide Net 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)			
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
<b>Consumer Program</b>													
Appliance Retirement	Appliances	0	0			0	0			0	0		
Appliance Exchange	Appliances	0	0			0	0			0	0		
HVAC Incentives	Equipment	-18,844	2,206			-5,271	452			-9,709,500	907,735		
Conservation Instant Coupon Booklet	Items	8,216	0			16	0			275,655	0		
Bi-Annual Retailer Event	Items	81,817	0			108	0			2,183,391	0		
Retailer Co-op	Items	0	0			0	0			0	0		
Residential Demand Response	Devices	0	0			0	0			0	0		
Residential Demand Response (IHD)	Devices	0	0			0	0			0	0		
Residential New Construction	Homes	19	0			1	0			13,767	0		
<b>Consumer Program Total</b>						<b>-5,146</b>	<b>452</b>			<b>-7,236,687</b>	<b>907,735</b>		
<b>Business Program</b>													
Retrofit	Projects	303	529			3,204	4,443			16,216,165	28,739,635		
Direct Install Lighting	Projects	444	197			501	204			1,250,388	736,541		
Building Commissioning	Buildings	0	0			0	0			0	0		
New Construction	Buildings	12	0			828	0			3,520,620	0		
Energy Audit	Audits	95	65			492	337			2,391,744	1,636,457		
Small Commercial Demand Response	Devices	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		
<b>Business Program Total</b>						<b>5,025</b>	<b>4,984</b>			<b>23,378,917</b>	<b>31,112,632</b>		
<b>Industrial Program</b>													
Process & System Upgrades	Projects	0	0			0	0			0	0		
Monitoring & Targeting	Projects	0	0			0	0			0	0		
Energy Manager	Projects	0	3			0	68			0	719,235		
Retrofit	Projects	0	0			0	0			0	0		
Demand Response 3	Facilities	0	0			0	0			0	0		
<b>Industrial Program Total</b>						<b>0</b>	<b>68</b>			<b>0</b>	<b>719,235</b>		
<b>Home Assistance Program</b>													
Home Assistance Program	Homes	0	0			0	0			0	0		
<b>Home Assistance Program Total</b>						<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>		
<b>Aboriginal Program</b>													
Home Assistance Program	Homes	0	0			0	0			0	0		
Direct Install Lighting	Projects	0	0			0	0			0	0		
<b>Aboriginal 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	0			138	0			545,536	0		
High Performance New Construction	Projects	34	0			1,407	0			2,065,200	0		
Toronto Comprehensive	Projects	0	0			0	0			0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0		
LDC Custom Programs	Projects	0	0			0	0			0	0		
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>1,545</b>	<b>0</b>			<b>2,610,736</b>	<b>0</b>		
<b>Other</b>													
Program Enabled Savings	Projects	14	40			624	824			1,673,712	9,927,473		
Time-of-Use Savings	Homes	0	0			0	0			0	0		
<b>Other Total</b>						<b>624</b>	<b>824</b>			<b>1,673,712</b>	<b>9,927,473</b>		
<b>Adjustments to 2011 Verified Results</b>						<b>2,047</b>				<b>20,426,678</b>			
<b>Adjustments to 2012 Verified Results</b>							<b>6,328</b>				<b>42,667,076</b>		
<b>Adjustments to Previous Years' Verified Results Total</b>						<b>2,047</b>	<b>6,328</b>			<b>20,426,678</b>	<b>42,667,076</b>		
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).		The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.				Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above does not consider persistence of savings							

Table 8c: Province-Wide Realization Rate and Net-to-Gross Ratios

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	1.00	1.00		0.51	0.46	0.42		1.00	1.00	1.00		0.46	0.47	0.44	
Appliance Exchange	1.00	1.00	1.00		0.51	0.52	0.53		1.00	1.00	1.00		0.52	0.52	0.53	
HVAC Incentives	1.00	1.00	1.00		0.60	0.50	0.48		1.00	1.00	1.00		0.50	0.49	0.48	
Conservation Instant Coupon Booklet	1.00	1.00	1.00		1.14	1.00	1.11		1.00	1.00	1.00		1.00	1.05	1.13	
Bi-Annual Retailer Event	1.00	1.00	1.00		1.12	0.91	1.04		1.00	1.00	1.00		0.91	0.92	1.04	
Retailer Co-op	1.00	n/a	n/a		0.68	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Residential New Construction	1.00	3.65	0.78		0.41	0.49	0.63		3.65	7.17	3.09		0.49	0.49	0.63	
<b>Business Program</b>																
Retrofit	1.06	0.93	0.92		0.72	0.75	0.73		0.93	1.05	1.01		0.75	0.76	0.73	
Direct Install Lighting	1.08	0.69	0.82		1.08	0.94	0.94		0.69	0.85	0.84		0.94	0.94	0.94	
Building Commissioning	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
New Construction	0.50	0.98	0.68		0.50	0.49	0.54		0.98	0.99	0.76		0.49	0.49	0.54	
Energy Audit	n/a	n/a	1.02		n/a	n/a	0.66		n/a	n/a	0.97		n/a	n/a	0.66	
Small Commercial Demand Response	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Small Commercial Demand Response (IHD)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Demand Response 3	0.76	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Industrial Program</b>																
Process & System Upgrades	n/a	n/a	0.85		n/a	n/a	0.94		n/a	n/a	0.87		n/a	n/a	0.93	
Monitoring & Targeting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Energy Manager	n/a	1.16	0.90		n/a	0.90	0.90		1.16	1.16	0.90		0.90	0.90	0.90	
Retrofit	1.11	n/a	n/a		0.72	n/a	n/a		0.91	n/a	n/a		0.75	n/a	n/a	
Demand Response 3	0.84	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Home Assistance Program</b>																
Home Assistance Program	1.00	0.32	0.26		0.70	1.00	1.00		0.32	0.99	0.88		1.00	1.00	1.00	
<b>Aboriginal Program</b>																
Home Assistance Program	n/a	n/a	0.05		n/a	n/a	1.00		n/a	n/a	0.95		n/a	n/a	1.00	
Direct Install Lighting	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Pre-2011 Programs completed in 2011</b>																
Electricity Retrofit Incentive Program	0.80	n/a	n/a		0.54	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
High Performance New Construction	1.00	1.00	1.00		0.49	0.50	0.50		1.00	1.00	1.00		0.50	0.50	0.50	
Toronto Comprehensive	1.13	n/a	n/a		0.50	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Multifamily Energy Efficiency Rebates	0.93	n/a	n/a		0.78	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
LDC Custom Programs	1.00	n/a	n/a		1.00	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
<b>Other</b>																
Program Enabled Savings	n/a	1.06	1.00		n/a	1.00	1.00		1.06	2.26	1.00		1.00	1.00	1.00	
Time-of-Use Savings	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	

Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated



## 2013 Report Highlights:

Provincially, LDCs achieved 86% of the cumulative energy savings target and 48% of the annual peak demand savings target to the end of 2013 (Scenario 2).

By the end of 2013, 42 LDCs had exceeded 80% of their 2011-2014 energy savings target and 19 LDCs had met or exceeded this target.

In 2013, LDCs had achieved over 600 GWh in savings, representing an increase of 20% over the 2012 net incremental energy savings results. Within 4 cents per kWh, Conservation programs continue to be a valuable and cost effective resource for customers across the province.

The BUSINESS PROGRAM continued to generate strong interest and participation amongst business customers with significant savings results. In 2013, 71% of total energy savings came from the BUSINESS PROGRAM and this momentum continues.

As the INDUSTRIAL PROGRAM matures, there are more and more studies in the PROCESS AND SYSTEMS pipeline converting to completed projects.

In 2013, significant operational advancements were made centering around creating a better customer and LDC experience:

- A number of operational changes were made in 2013 to enhance processes. For instance, payments on LDC invoices were streamlined to an average of 20 days, there were enhanced reporting capabilities, and iCon updates helped to improve users' experience.
- Proactive updates to measures using saveONenergy incentives allowed programs to stay ahead of changing market conditions. Specifically in 2013, LEDs became popular measures in both the Consumer and Business programs.
- Technical tools also played a significant role in 2013. These included an updated Measure and Assumptions List as well as new and improved engineering worksheets for the RETROFIT initiative, which allowed customers to more easily access programs by building strong business cases based on latest estimates of savings potential.
- The Conservation Fund introduced the LDC Fast Track stream to support LDCs with innovative program ideas. In 2013, LDC pilots included Oshawa PUC Networks Inc.'s retro-commissioning program, the Toronto Hydro-Electric System Limited multi-unit demand response system, and Niagara-on-the-Lake Hydro Inc.'s electric vehicles load shifting program.

Key market sectors were also engaged in 2013 through Capability Building programs targeted at Home Builders and HVAC Installers to build conservation knowledge with these partners. Energy Efficiency Services Programs (EESPs) also provided valuable support to a variety of sectors.

## 2013 KEY EVALUATION FINDINGS

### CONSUMER PROGRAM

#### Appliance Retirement Initiative

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

#### Appliance Exchange Initiative

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

#### Heating and Cooling Initiative

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

### Annual Coupons

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

### Bi-Annual Coupon Events

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

### *peaksaverPLUS*

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

### Residential New Construction

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

## HOME ASSISTANCE PROGRAM

### Home Assistance Program

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

## BUSINESS PROGRAM

### Retrofit

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

#### Small Business Lighting

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

#### Audit Funding

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

#### Existing Building Commissioning

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

#### High Performance New Construction

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

## INDUSTRIAL PROGRAM

### Process and Systems Upgrade Initiative

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

### DR-3

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

#### Note:

The Key Evaluation findings are derived from the 2013 evaluations of the saveONenergy programs. These findings were developed by 3<sup>rd</sup> party evaluation contractors. Complete findings are detailed in the contractors' full evaluation reports, which will be available publicly in Q4 2014.

### 4.3 SPENDING

Each year, from 2011 through 2013, GPI received Program Administration Based (PAB) funding for the administration of OPA-Contracted Province-Wide CDM Programs offered in GPI's service area.

**Table 9: GPI Program Administration Based (PAB) Funding By Program**

<b>Program</b>	<b>2013</b>	<b>Cumulative 2011 - 2013</b>
Consumer Program	\$ 38,212.28	\$ 152,849.16
Commercial & Institutional Program	37,302.30	167,860.36
Industrial Program	8,000.00	36,000.00
Home Assistance Program	4,868.26	14,604.78
<b>Total PAB Funding</b>	<b>\$ 88,382.84</b>	<b>\$ 371,314.30</b>

GPI paid Burman Energy (see Section 4.4 for more details) a significant portion of the PAB funding to administer CDM programs in Grimsby, although a portion was withheld to support GPI's internal costs as well.

Participant Incentive (PI) funding and Performance Based Funding (PBF) for the provision of applicant incentives and related costs was also received on a cost recovery basis.

Of note, there were no expenditures in 2013 on OPA-Contracted Province-Wide CDM Programs that supported Pre-2011 Programs, or 'Not-In-Market' Programs.

The *Table 10* depicts total spending on OPA-Contracted Province-Wide CDM Programs in 2013 by initiative. *Table 11* depicts the same chart with cumulative spending for 2011 through 2013.

Table 10: GPI CDM Spending By Program Initiative in 2013

Initiative	Program Administration Budget (PAB)	Performance Based Funding (PBF)	Participant Incentives (PI)	TOTAL
<b>Consumer Program</b>				
Appliance Retirement	\$7,518.24			\$7,518.24
Appliance Exchange	\$7,468.24			\$7,468.24
HVAC Incentives	\$7,518.24			\$7,518.24
Conservation Instant Coupon Booklet	\$120.00			\$120.00
Bi-Annual Retailer Event	\$14,770.24			\$14,770.24
Residential Demand Response	\$12,882.65		\$9,276.52	\$22,159.17
New Construction Program	\$7,388.24			\$7,388.24
Home Energy Assessment Tool	\$3,694.15			\$3,694.15
<b>TOTAL CONSUMER PROGRAM:</b>	<b>\$61,360.00</b>	<b>\$0.00</b>	<b>\$9,276.52</b>	<b>\$70,636.52</b>
<b>Business Program</b>				
Retrofit - ERII	\$22,699.48		\$102,358.27	\$125,057.75
Direct Installed Lighting	\$11,074.80	\$13,750.00	\$60,134.75	\$84,959.55
Existing Building Commissioning Incentive	\$1,681.45			\$1,681.45
New Construction and Major Renovation	\$1,681.45			\$1,681.45
Energy Audit	\$3,512.90		\$1,286.00	\$4,798.90
Commercial Demand Response	\$0.00			\$0.00
Demand Response 3	\$0.00			\$0.00
<b>TOTAL BUSINESS PROGRAM</b>	<b>\$40,650.08</b>	<b>\$13,750.00</b>	<b>\$163,779.02</b>	<b>\$218,179.10</b>
<b>Industrial Program</b>				
Process & System Upgrades				
a) preliminary study	\$2,500.00			\$2,500.00
b) engineering study	\$2,500.00			\$2,500.00
c) program incentive	\$2,500.00			\$2,500.00
Monitoring & Targeting	\$2,500.00			\$2,500.00
Energy Manager	\$2,500.00			\$2,500.00
Key Account Manager	\$0.00			\$0.00
Demand Response 3	\$2,581.00			\$2,581.00
<b>TOTAL INDUSTRIAL PROGRAM</b>	<b>\$15,081.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$15,081.00</b>
<b>Home Assistance Program</b>				
Home Assistance Program	\$3,485.90			\$3,485.90
<b>Pre 2011 Programs</b>				
Electricity Retrofit Incentive Program	\$0.00			\$0.00
High Performance New Construction	\$0.00			\$0.00
Toronto Comprehensive	\$0.00			\$0.00
Multifamily Energy Efficiency Rebates	\$0.00			\$0.00
Data Centre Incentive Program	\$0.00			\$0.00
EnWin Green Suites	\$0.00			\$0.00
<b>TOTAL PRE-2011 PROGRAMS</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>TOTAL Province-wide CDM PROGRAMS</b>	<b>\$120,576.98</b>	<b>\$13,750.00</b>	<b>\$173,055.54</b>	<b>\$307,382.52</b>



Table 11: Cumulative GPI CDM Spending By Program Initiative 2011 to 2013

Initiative	Program Administration Budget (PAB)	Performance Based Funding (PBF)	Participant Incentives (PI)	TOTAL
<b>Consumer Program</b>				
Appliance Retirement	\$22,064.93			\$22,064.93
Appliance Exchange	\$14,917.84			\$14,917.84
HVAC Incentives	\$21,361.93			\$21,361.93
Conservation Instant Coupon Booklet	\$15,355.71			\$15,355.71
Bi-Annual Retailer Event	\$20,546.93			\$20,546.93
Residential Demand Response	\$22,308.15		\$9,276.52	\$31,584.67
New Construction Program	\$17,519.83			\$17,519.83
Home Energy Assessment Tool	\$3,694.15			\$3,694.15
<b>TOTAL CONSUMER PROGRAM:</b>	<b>\$137,769.47</b>	<b>\$0.00</b>	<b>\$9,276.52</b>	<b>\$147,045.99</b>
<b>Business Program</b>				
Retrofit - ERII	\$67,273.48		\$180,662.59	\$247,936.07
Direct Installed Lighting	\$44,687.41	\$32,725.00	\$132,595.50	\$210,007.91
Existing Building Commissioning Incentive	\$10,007.81			\$10,007.81
New Construction and Major Renovation	\$11,935.31			\$11,935.31
Energy Audit	\$13,939.25		\$1,286.00	\$15,225.25
Commercial Demand Response	\$0.00			\$0.00
Demand Response 3	\$0.00			\$0.00
<b>TOTAL BUSINESS PROGRAM</b>	<b>\$147,843.26</b>	<b>\$32,725.00</b>	<b>\$314,544.09</b>	<b>\$495,112.35</b>
<b>Industrial Program</b>				
Process & System Upgrades				
a) preliminary study	\$3,583.33			\$3,583.33
b) engineering study	\$3,583.33			\$3,583.33
c) program incentive	\$3,583.33			\$3,583.33
Monitoring & Targeting	\$3,583.34			\$3,583.34
Energy Manager	\$2,750.00			\$2,750.00
Key Account Manager	\$250.00			\$250.00
Demand Response 3	\$7,060.22			\$7,060.22
<b>TOTAL INDUSTRIAL PROGRAM</b>	<b>\$24,393.55</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$24,393.55</b>
<b>Home Assistance Program</b>				
Home Assistance Program	\$13,416.02			\$13,416.02
<b>Pre 2011 Programs</b>				
Electricity Retrofit Incentive Program	\$7,439.00			\$7,439.00
High Performance New Construction	\$0.00			\$0.00
Toronto Comprehensive	\$0.00			\$0.00
Multifamily Energy Efficiency Rebates	\$0.00			\$0.00
Data Centre Incentive Program	\$0.00			\$0.00
EnWin Green Suites	\$0.00			\$0.00
<b>TOTAL PRE-2011 PROGRAMS</b>	<b>\$7,439.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$7,439.00</b>
<b>TOTAL Province-wide CDM PROGRAMS</b>	<b>\$330,861.30</b>	<b>\$32,725.00</b>	<b>\$323,820.61</b>	<b>\$687,406.91</b>

#### 4.4 ADDITIONAL COMMENTS

GPI contracted Burman Energy to administer all CDM programs in the Grimsby service area. Through them, GPI promoted the Direct Install and Retrofit programs with direct visits to over 100 local small businesses.

In addition, GPI was active in the community with CDM-related activities in 2013. The Grimsby Power booth was prominent at several community functions including the *Home and Garden Show* in April, the *Fifty Plus Friends Community Event* in May, the *Happening in the Park* in June, and the *Happening on the Forty* in August. Small businesses in Grimsby showed a great deal of interest, particularly in the Direct Install Lighting initiative.

GPI achieved good success in 2013 with the CDM programs in place. GPI hopes to build on that momentum, and with several new initiatives, the potential for renewed success is high in 2014.

## 5 COMBINED CDM REPORTING ELEMENTS

### 5.1 PROGRESS TOWARDS CDM TARGETS

#### 5.1.1 GPI'S PROGRESS TOWARD CDM TARGETS

The following tables depict GPI's verified demand and energy savings for 2013 under Scenario 1, where demand savings are assumed to persist for just one year. GPI achieved 32.5% of the demand savings target and 123.1% of the energy savings target in 2013. This compares to 2012 values under Scenario 1 of 21.7% and 53.6% respectively.

**Table 12a: GPI Net Peak Demand Savings at the End User Level (MW)**

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.5	0.2	0.2	0.2
2012 - Verified†	0.0	0.6	0.2	0.2
2013 - Verified†	0.0	0.0	0.6	0.2
2014				
<b>Verified Net Annual Peak Demand Savings Persisting in 2014:</b>				<b>0.7</b>
<b>Grimsby Power Inc. 2014 Annual CDM Capacity Target:</b>				<b>2.1</b>
<b>Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):</b>				<b>32.5%</b>

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

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	1.1	1.0	1.0	1.0	4.2
2012 - Verified†	0.0	1.0	1.0	1.0	2.9
2013 - Verified†	0.0	0.0	1.2	1.2	2.4
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					<b>9.6</b>
<b>Grimsby Power Inc. 2011-2014 Annual CDM Energy Target:</b>					<b>7.8</b>
<b>Verified Portion of Cumulative Energy Target Achieved in 2014 (%):</b>					<b>123.1%</b>

*†Includes adjustments to previous Years' verified results*

### 5.1.2 PROVINCIAL PROGRESS TOWARD CDM TARGETS

The Final Report on CDM Results from the OPA outlined the province's progress toward its targets. Overall, the province achieved 27.0% of the Demand Savings (kW) target and 85.7% of the energy savings target in 2013. By comparison, GPI achieved better than average success on both fronts.

Table 13a: Province-wide Net Peak Demand Savings (MW) Performance

Implementation Period	Annual			
	2011	2012	2013	2014
2011	216.3	136.6	135.8	129.0
2012†	1.4	253.3	109.8	108.2
2013†	0.6	7.0	404.5	122.0
2014				
<b>Verified Net Annual Peak Demand Savings in 2014:</b>				<b>359.2</b>
<b>2014 Annual CDM Capacity Target:</b>				<b>1,330</b>
<b>Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):</b>				<b>27.0%</b>

Table 13b: Province-wide Net Cumulative Energy Savings (GWh) Performance

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	606.9	603.0	601.0	582.3	2,393.1
2012†	18.7	503.6	498.4	492.6	1,513.3
2013†	1.7	44.4	603.3	583.4	1,232.8
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					<b>5,139.1</b>
<b>2011-2014 Cumulative CDM Energy Target:</b>					<b>6,000</b>
<b>Verified Portion of Cumulative Energy Target Achieved in 2014 (%):</b>					<b>85.7%</b>

†Includes adjustments to previous Years' verified results

## 5.2 VARIANCE FROM CDM STRATEGY

The following table provides a comparison of the original GPI CDM Strategy document projections against verified results for 2011 - 2013. With favorable participation levels, GPI may achieve the demand savings target of 2,060 kW by 2014, but with little room to spare. While there is a large gap between the verified Scenario 1 demand savings in 2013 and the projected savings for 2014, savings from the *peaksaver* PLUS® program and TOU Pricing that have yet to be factored in may help bring up the total. GPI achieved the energy-saving target of 7,760,000 kWh ahead of schedule in 2013. The savings continue to grow close to the 10 GWh level.

**Table 14: Comparison Between GPI's Verified Results for 2013 and the CDM Strategy report issued Feb 14, 2011 (Includes 2014 Forecast Values)**

Overall YEAR	Targets Per CDM Strategy <sup>(*)</sup>		Demand Savings Trend (kW)		Energy Savings Trend (kWh)	
	Demand Savings (kW)	Energy Savings (kWh)	Scenario 1:	Scenario 2:	Scenario 1:	Scenario 2:
			Demand Savings Persist for 1 Year	Demand Savings Persist to 2014	Demand Savings Persist for 1 Year	Demand Savings Persist to 2014
2011	920	827,000	222	515	4,159,279	4,205,920
2012	1,250	2,559,000	447	828	7,106,538	7,123,680
2013	1,610	5,054,000	669	1,040	9,552,388	9,552,388
2014	2,060	8,377,000	2,060	2,060	9,800,000	9,800,000

<sup>(\*)</sup> EB-2010-0215 - GPI CDM/GEA 2011-2014 Strategy Filing, as amended February 14, 2011

The following graphs depict Demand and Energy Savings achieved in 2011 - 2013 and forecast for 2014, comparing them to the forecast presented in GPI's CDM 2011-2014 Strategy Filing (EB-2010-0215).

Table 15a: Graph Comparison of Demand Savings Performance to CDM Strategy Forecast

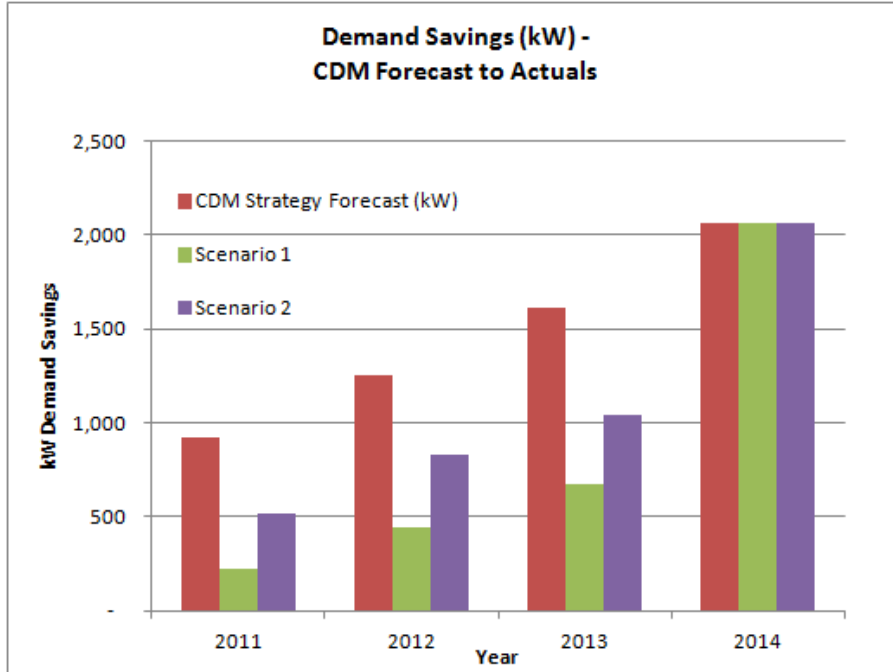
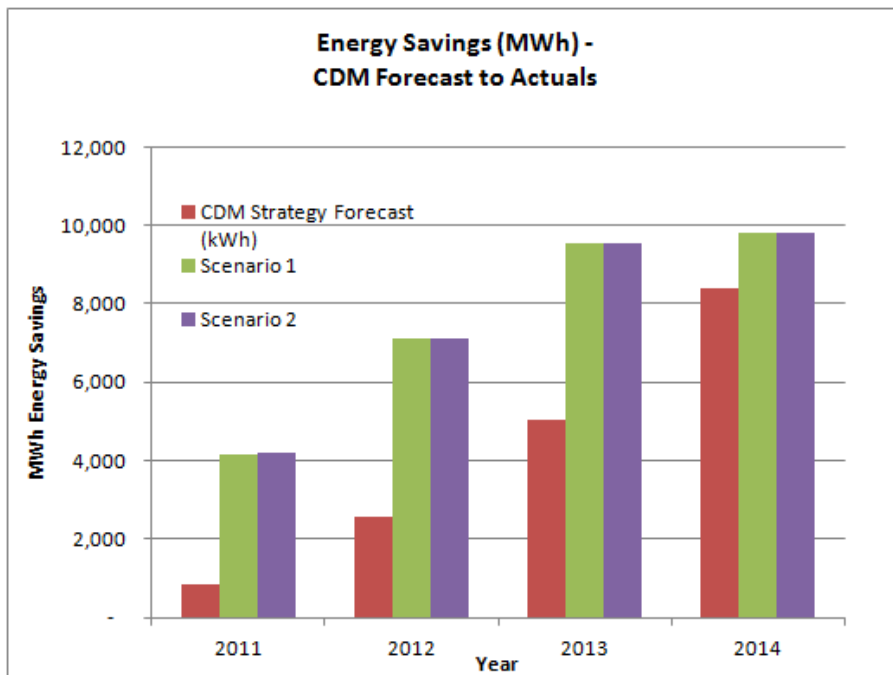


Table 15b: Graph Comparison of Energy Savings Performance to CDM Strategy Forecast



As shown, the forecast for demand savings overestimated actual under both Scenario 1 and 2 in each year. Compared to the original forecasts, Demand Savings under Scenario 1 were lower than forecast by 58.4% in 2013.

The energy savings forecast on the other hand clearly underestimated the actual results for both Scenario 1 and 2. Energy Savings in 2013 under Scenario 1 were above forecast by 89.0%.

### **5.3 OUTLOOK TO 2014 AND STRATEGY MODIFICATIONS**

The CDM strategy presented by GPI in February 2011 (EB-2010-0215) predicted high growth in Demand Savings, and more modest growth in Energy Savings. In fact, the reverse happened in 2011 - 2013. The initiatives with high Demand Savings were adopted slowly, while several Energy Savings initiatives have grown rapidly.

The energy savings realized from such programs as the Retrofit and DIL initiatives were difficult to predict at the time the CDM forecast was prepared. Local businesses showed enthusiasm for these initiatives, which by the third quarter of 2013 had driven savings over target.

Sources for demand savings have been primarily from the Demand Response 3, which provided nearly 50% of demand savings achieved in 2013. Residential HVAC, *peaksaver* PLUS® and the Business program Retrofit and DIL initiatives also made significant contributions to demand savings. The progress toward target improved from 21.7% in 2012, to 32.5% in 2013 under Scenario 1. The demand savings from *peaksaver* PLUS® and TOU Pricing have yet to be factored in to these results, and they may push GPI closer to the target.

#### Consumer Programs:

Consumer programs contributed almost 12% of the energy savings achieved by GPI in 2013 and 10% of the demand savings. While marketing efforts were directed at the newly launched *peaksaver* PLUS® initiative, it was the HVAC program that dominated demand savings in the Consumer sector. However, this sector's demand savings have declined year over year, to just 65% of 2011 levels.

The Residential Demand Response program (*peaksaver* PLUS®) was expected to assist GPI in boosting its Demand Savings in late 2013 and 2014. Initial interest seemed to be high but actual installations have been slow to materialize, with 23 installations made in 2013, and the potential for growth in 2014. The verified results hint that more savings may be realized for this initiative when an updated evaluation is completed.

#### Commercial & Institutional Programs:

Over 40% of the total demand savings and 87% of the total energy savings were derived in the Commercial & Institutional program sector. Grimsby small businesses in particular, showed great interest in the Retrofit and the Direct Install Lighting initiatives. The Retrofit program was the most active initiative and provided high demand and energy savings. Its CDM energy savings value per



project averaged over 44,000 kWh. Cumulatively, project completions went from 11 to 31 in 2013 and continued to grow in 2014. GPI will continue to seek growth in participation for this initiative, although many of the businesses most likely to participate have already done so.

#### Industrial Programs:

The DR-3 initiative provided all the energy and demand savings for the Industrial program in 2013. GPI has little control over the results of this initiative. With large users, it often takes longer for existing marketing efforts to produce results. For this reason, GPI will continue to pursue its existing marketing strategy and to seek new opportunities to grow participation in this program sector.

On March 31st, 2014 the Minister of Energy issued a directive entitled “Continuance of the OPA’s Demand Response Program under IESO management” which effectively halts new customer enrollments in the DR-3 program until the IESO has a program in market. This is estimated to be some time in 2015.

The DR-3 Initiative is a significant contributor to helping LDCs achieve their demands savings target. The program has taken some time to get traction and LDCs have been diligently working with their customers to encourage participation in the DR-3 program. LDC customers are now in a position where many of them have contracted with an Aggregator but will be unable to participate due to the inability of the Aggregator to receive new contract schedules resulting in the current “pipeline” of potential DR contributors being stranded.

#### Home Assistance Program

Despite an initial investment and assignment of personnel to administer the initiative, there were no energy or demand savings from the Home Assistance program in 2013. Quite a few attempts to build this program were made, but the difficulty in finding eligible applicants has been a significant barrier to its success.

#### Summary

GPI has actively promoted CDM programs in Grimsby using “bill inserts, newspaper ads, online advertising and attendance at community events.” (*Page 2, GPI CDM Strategy*). In addition, there have been targeted mailings and small business visitations to help drive greater participation. These tactics will continue in order to build awareness and interest in the saveONenergy programs. The focus will change to particular initiatives over time, particularly those with high CDM values per project (or unit). Future effort will be directed at the *peaksaver PLUS*<sup>®</sup> initiative, in addition to those previously highlighted: Retrofits, Direct Install Lighting, Bi-annual Retailer Events and HVAC Incentives.

In addition, GPI is actively pursuing leads in business conservation projects by providing information to the community, and calling or meeting with local business leaders in order to build on GPI’s success.

## 6 CONCLUSION

Over the course of 2013, GPI achieved 0.67 MW in peak demand savings and 9.55 GWh in energy savings, which represents 32.5% and 123.1% of GPI's 2014 target, respectively (*under Scenario 1*). These results are representative of a considerable effort expended by GPI, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in subsequent CDM terms.

Despite continuing improvements to existing programs, GPI faces challenges in 2014 with the current CDM framework. With the limited slate of available OPA Programs, GPI will struggle to meet its 2.06 MW demand savings target. Depending on the customers' continued enthusiasm for CDM programs and the updated evaluation of the RDR initiative (*peaksaver PLUS®*), GPI may achieve the demand savings target with little room to spare.

Looking ahead, there is almost no opportunity to make valuable changes to the current program portfolios and have these changes reflected in GPI's 2014 results. However, LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs for the 2015 – 2020 program periods which will strive to meet the needs of industry and consumers.

## APPENDIX A: INITIATIVE DESCRIPTIONS

### RESIDENTIAL PROGRAM

#### *APPLIANCE RETIREMENT INITIATIVE (Exhibit D)*

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

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

**Targeted Items:** Large refrigerators, large freezers, window air conditioners and portable dehumidifiers.

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

Additional detail is available from the OPA:

- Schedule B-1, Exhibit D
- SaveOnEnergy website: <https://saveonenergy.ca/Consumer.aspx>

## ***APPLIANCE EXCHANGE INITIATIVE (Exhibit E)***

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Spring and Fall

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

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

**Note:** *In 2013, window air conditioners were no longer accepted as part of the Appliance Exchange initiative, since, “energy savings from dehumidifiers are significantly greater {over 40%} than the energy savings from window air conditioners”. (saveONenergy E-blast – May 18, 2012)*

**Targeted Items:** Window air conditioners and portable dehumidifiers

**Delivery:** OPA contracts with participating retailers for collection of eligible units.

Additional detail is available from the OPA:

- Schedule B-1, Exhibit E, and
- SaveOnEnergy website: <https://saveonenergy.ca/Consumer.aspx>

## ***HVAC INCENTIVES INITIATIVE (Exhibit B)***

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year-round

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

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

**Targeted Items:** Central air conditioners and furnaces

**Delivery:** OPA contracts centrally for delivery of the program and LDCs are encouraged to convince local contractors to participate in the Initiative.

Additional detail is available from the OPA:

- Schedule B-1, Exhibit B, and
- Saveonenergy website <https://saveonenergy.ca/Consumer.aspx>

**CONSERVATION INSTANT COUPON BOOKLET INITIATIVE**  
**(Exhibit A)**

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

**Description:** This initiative provides customers with year-round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy-to-install energy efficient measures and can be redeemed at participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase locations. Downloadable coupons were also available at [www.saveoneenergy.ca](http://www.saveoneenergy.ca).

**Targeted Items:** ENERGY STAR® qualified Standard Compact Fluorescent Lights (CFLs), ENERGY STAR® qualified light fixtures, lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in timers, advanced power bars, clotheslines and programmable thermostats

**Delivery:** The OPA contracts centrally for the distribution of coupon booklets across Ontario. Each LDC distributes coupons at local events. The OPA enters into agreements with retailers to honour the coupons.

Additional details are available from the OPA:

- Schedule B-1, Exhibit A, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

***BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)***

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Bi-annual events

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

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

**Targeted Items:** Same as the conservation instant coupon booklet initiative

**Delivery:** The OPA enters into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also refer retailers to the OPA.

Additional detail is available from the OPA:

- Schedule B-1, Exhibit C, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

## ***NEW CONSTRUCTION PROGRAM (Schedule B-2)***

**Target Customer Type(s):** Residential Home Builders, and by extension, Residential Customers

**Initiative Frequency:** Year-round

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

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

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

**Targeted Items:** All-off switch, ECM motors, ENERGY STAR qualified central a/c, lighting control products, lighting fixtures, EnerGuide 83 whole home, EnerGuide 85 whole home

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

Additional detail is available from the OPA:

- Schedule B-2, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>



**RESIDENTIAL DEMAND RESPONSE PROGRAM**  
**(Schedule B-3)**

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

**Initiative Frequency:** Year-round

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

**Description:** Before 2011, this was known as the *peaksaver*™ program. Participants were eligible to receive a free programmable thermostat or switch, including installation, together with a \$25 bill credit. LDCs were given the opportunity to continue to offer the standard load control program (programmable thermostat or switch with a \$25 bill credit) for the first 8 months of 2011 (referred to as *peaksaver*®Extension). After August 2011, the Extension ended and the program (including marketing) ceased until new IHD products were available. Under the new *peaksaver* PLUS® program, participants receive access to price and real-time consumption information on an In-Home Display (IHD) in place of the bill credit.

**Targeted Items:** central air conditioning, water heaters and pool pumps

**Delivery:** LDC's recruit customers and procure technology

Additional detail is available from the OPA:

- Schedule B-3, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

## COMMERCIAL AND INSTITUTIONAL PROGRAM

### *EQUIPMENT REPLACEMENT INCENTIVE INITIATIVE (ERII) A.K.A. "RETROFIT" INITIATIVE (Schedule C-2)*

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

**Initiative Frequency:** Year-round

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

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

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

**Delivery:** LDC delivered.

Additional detail is available from the OPA:

- Schedule C-2, and
- Saveonenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

***DIRECT INSTALL INITIATIVE (DIL) A.K.A. "SMALL BUSINESS LIGHTING" (Schedule C-3)***

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

**Initiative Frequency:** Year-round

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

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

**Target End Uses:** Energy efficient lighting and water heating systems

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

Additional detail is available from the OPA:

- Schedule C-3, and
- Saveonenergy website <https://saveonenergy.ca/Business/Program-Overviews/Small-Business-Lighting-and-AC.aspx>

***EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE  
(Schedule C-6)***

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

**Initiative Frequency:** Year-round

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

**Description:** This initiative offers participants incentives for the following:

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

**Targeted End Uses:** Chilled water systems for space cooling

**Delivery:** LDC delivered.

Additional detail is available from the OPA:

- Schedule C-6, and
- Saveonenergy website: <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

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

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** Building modeling, lighting, space cooling, ventilation and other Measures

**Delivery:** LDC delivers to customers and design decision makers.

Additional detail is available from the OPA:

- Schedule C-4, and
- Saveonenergy website: <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

## ***ENERGY AUDIT INITIATIVE (Schedule C-1)***

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** Various

**Delivery:** LDC delivered.

Additional detail is available from the OPA:

- Schedule C-1, and
- Saveonenergy website: <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

## INDUSTRIAL PROGRAM

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

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

**Initiative Frequency:** Year-round

**Objectives:** The objectives of this initiative are to:

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

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

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

**Targeted End Uses:** Process and systems

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

Additional detail is available from the OPA:

- Schedule D-1, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

## ***MONITORING & TARGETING INITIATIVE (Schedule D-2)***

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** Process and systems

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

Additional detail is available from the OPA:

- Schedule D-2, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>



### ***ENERGY MANAGER INITIATIVE (Schedule D-3)***

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** Process and systems

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

Additional detail is available from the OPA:

- Schedule D-3, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

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

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered

Additional detail is available from the OPA:

- ScheduleD-4

### ***DEMAND RESPONSE 3 (Schedule D-6)***

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** Commercial and Industrial Operations

**Delivery:** DR-3 is delivered by Demand Response Providers (“DRPs”), under contract to the OPA. The OPA administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). OPA provides administration including settlement, measurement and verification, and dispatch. LDCs are responsible for local customer outreach and marketing efforts.

Additional detail is available from the OPA:

- Schedule D-6, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

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

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

**Target Customer Type(s):** Income Qualified Residential Customers

**Initiative Frequency:** Year-round

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

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

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

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule E -1

## **APPENDIX B: PRE-2011 PROGRAM INITIATIVES**

### ***ELECTRICITY RETROFIT INCENTIVE PROGRAM (“ERIP”)***

**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

**Initiative Activities/Progress:** The ERIP program finished in 2010; it was replaced with the 2011-2014 ERII “Retrofit” Program.

**In Market Date:** The ERIP program ran successfully in Grimsby from 2007.

**Additional Comments:**

- While it took some time for companies to realize the benefits of participating in ERIP, the uptake was significant over the term of the program with 24 successful applicants.
- Applicants complained about low incentive amounts and the lack of continuity and certainty of the program after December 2010

## ***HIGH PERFORMANCE NEW CONSTRUCTION (“HPNC”)***

**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 used 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 was 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)

**Initiative Activities/Progress:** The HPNC program had limited uptake and provided no savings after 2011.

**In Market Date:** The HPNC program was in place from 2010.

**Additional Comments:**

- Not applicable

## ***MULTIFAMILY ENERGY EFFICIENCY REBATES***

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

**Initiative Frequency:** Year-round

**Objective:** Improve energy efficiency of Multi-unit building

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

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

**Targeted End Uses:** Electricity saving measures

**Delivery:** OPA contracted with Greensaver

**Initiative Activities/Progress:** There was no uptake for this program in Grimsby in 2011-2014.

**In Market Date:** Not applicable

**Additional Comments:**

- GreenSaver was not active in the Grimsby area