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# **ENWIN Utilities Ltd.**

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**Conservation and Demand Management**

## **2011 Annual Report**

**Submitted to:**

**The Ontario Energy Board**

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## Executive Summary

ENWIN Utilities Ltd. (ENWIN) is Windsor's Local Distribution Company (LDC), responsible for the distribution of electricity and the servicing and maintenance of Windsor's power line infrastructure. ENWIN is working hard to be the 'Best in Class' and provide superior service to its community of customers. Conservation and Demand Management (CDM) plays a key role in securing its future for a reliable, sustainable, and affordable energy supply. ENWIN feels that conservation is an essential part of its core services and can help customers to manage rising energy and operating costs.

The Ontario Energy Board (OEB) has set CDM targets for ENWIN, as a condition of its licence, to achieve 117.89 GWh of energy savings and 26.81 MW of summer peak demand savings, over the period of January 1, 2011 through December 31, 2014. This Annual Report covers ENWIN's CDM activities and progress towards achieving its targets for the period of January 1, 2011 to December 31, 2011.

ENWIN is pleased to report steady progress in 2011 towards the achievement of its CDM targets. Despite start-up challenges, ENWIN has achieved 27% of its four-year energy savings target and 8% of its 2014 summer peak demand savings target. With over 25,000 CDM program participants in the ENWIN service territory, it is clear that Windsor supports conservation and all of its benefits.

The Ontario Power Authority (OPA) is responsible for coordinating province-wide CDM program initiatives and 2011 was a "start-up" year for the current round of programs. In 2011, ENWIN needed to finalize schedules, develop processes, and procure services and resources before it could market the OPA CDM program initiatives to its customers. Delays in the launch of OPA CDM programs and challenges with the online program delivery systems also hindered the timely and efficient delivery of CDM programs throughout the province, including in ENWIN's service territory.

## Board-approved program applications

ENWIN has not filed any applications to the OEB relating to Board-approved CDM Programs. ENWIN recognizes that OPA province-wide programs were never designed to meet 100% of the LDCs' CDM targets and sees Board-approved programs as a potential means for extending the savings realized from the province-wide programs. In light of the OEB's decision on the Toronto Hydro application for Board-approved programs and the OEB taking a very broad and all-encompassing definition of 'duplicative,' ENWIN does not foresee pursuing Board-approved programs at this time. ENWIN will continue to evaluate the need and feasibility of Board-approved CDM programs as it tracks progress from province-wide programs, as opportunities present themselves, and as the conditions and requirements for approval evolve.

## 2011 CDM program delivery

ENWIN offered a full suite of CDM programs that were available from the OPA for its residential, institutional, commercial, and industrial customers. Many of the residential initiatives were available for customers to participate in throughout 2011, but some were not ready to be launched until later in the year; **peaksaverPLUS™** was not available until 2012. The delays in launching a large majority of the initiatives were due to OPA start-up issues, making some of the initiatives unavailable until later in the year. Further delays were associated with the launch of OPA online tools, thus delaying ENWIN in sourcing vendors for equipment and services needed for specific initiatives in a timely manner.

ENWIN's role in delivery of the initiatives included promotion, customer service, acting as the local "face" for the initiatives in the community, managing channel partner networks involved with some of the initiatives, reporting to the OPA, application review, referral of participants to the OPA for some initiatives, and contracting for delivery of some initiatives with third-party service providers.

Prior to 2011, ENWIN was successful in obtaining a custom program through the OPA that was called Green Suites. It focused on the hotel/motel industry to deliver the Electricity Retrofit Incentive Program (ERIP). ENWIN was so successful that it exceeded its 124 kW target by 196 kW, paying \$30,000 in customer incentives. In 2011, ENWIN contacted Green Suites applicants (and applicants of the 2010 Electricity Retrofit Incentive Program) that still had active applications in person and by phone to ensure that projects were completed and invoices were submitted on time to meet program deadlines. The savings from projects completed under these programs in 2011 counted towards ENWIN's 2011-2014 CDM targets.

In all, over 25,000 ENWIN customers participated in at least one of the CDM programs offered, making it clear that Windsor supports conservation and all of its benefits. The Bi-Annual Retailer Event was by far the program with the most participation, with 13,527 participants, followed by the Conservation Instant Coupon Booklet Initiative, with 7,800 participants. The HVAC Incentives Initiative was also quite popular, with 2,380 participants. Within the commercial and institutional initiatives, the Direct Install Lighting Initiative had the most participants, at 508, followed by the Equipment Replacement Incentive Initiative (ERII), with 47 participants.

ENWIN was provided with funding from the OPA to deliver its CDM programs and these funds were used efficiently and effectively to drive uptake in the programs in order to meet ENWIN's targets and realize the benefits of CDM for consumers.

## **CDM program results**

The OPA contracted independent third-party evaluators to evaluate the province-wide OPA programs. The results of those evaluations are presented in this report along with their impact on ENWIN's progress towards its targets. The evaluation results provide calculations to adjust the gross savings to determine the net savings from a given initiative. The net savings are used to track ENWIN's progress towards its targets.

The residential, commercial and institutional, and pre-2011 programs completed in 2011 contributed roughly equivalent amounts towards ENWIN's CDM targets in 2011. The industrial programs contributed only about 3% of the net annual peak demand savings for 2014 and only about 5% of the 2011-2014 net cumulative energy savings, however this uses the very conservative assumption that DR3 contracts established in 2011 will not persist until 2014. The HVAC Incentives Initiative contributed the highest amount to ENWIN's net annual peak demand savings in 2014, followed by the projects completed in 2011 under the Electricity Retrofit Incentive Program. There were 39 projects completed in 2011 under the Electricity Retrofit Incentive Program, with incentives valued at over \$900,000. The projects completed in 2011 under the Electricity Retrofit Incentive Program contributed the highest amount to ENWIN's 2011-2014 net cumulative energy savings, followed by ERII. These are industrial, commercial and institutional initiatives. The HVAC Incentives Initiative was the residential initiative that contributed the highest amount to ENWIN's 2011-2014 net cumulative energy savings.

## Lessons learned

ENWIN has provided comments on OPA program initiatives based on the lessons it has learned delivering CDM in its service territory in 2011 and earlier. ENWIN believes that the OPA should consider introducing specialized public sector initiatives (or special rules within existing initiatives) to help overcome the up-front capital costs and project eligibility requirements needed to proceed with much-needed energy-efficiency retrofits in public sector facilities. ENWIN would like to see greater program flexibility for some of the industrial, commercial and institutional initiatives that require long-term contracts or large up-front costs without guaranteed returns that were seen as barriers to participation by some customers in its service territory. Finally, ENWIN believes that its mandated targets should be re-evaluated due to the lost potential from a decline in industry within its service territory.

Generating interest in the take-up of the DR3 program is also difficult within ENWIN's service territory. Prior to 2011, all program incentive levels in the province were consistent and very attractive. A lot of time was spent with customers preparing proposals with our Aggregator. In April 2011, the Independent Electricity System Operator (IESO) and the OPA revised the incentive levels by segregating the province into Standard Rates Zones and Discount Zones. ENWIN's service territory fell within a Discount Zone, which impacted existing DR3 proposals with customers by reducing their eligible incentives by 50%. These customers have declined the opportunity to participate in the program since this incentive reduction was introduced.

As noted, 2011 was a ramp-up year for implementing CDM programs at ENWIN. 32% of ENWIN's Energy and Demand achieved targets were a result of pre-2011 program activity. ENWIN's efforts throughout 2011 concentrated on getting the available programs in place, contracting third-party service providers, and hiring and training staff. The Process & Systems Upgrade Initiative (PSUI) had many program delivery issues, and although available, ENWIN did not have any uptake in this initiative until November of 2011. In November of 2011, ENWIN hired a Key Account Manager (KAM) and the resulting direct contact by the KAM with ENWIN's larger customers increased interest in PSUI.

ENWIN faced challenges with the original *peaksaver*<sup>®</sup> initiative that included a problem with the communication frequency between the thermostats and the OPA's demand response activation equipment and a recall of faulty batteries within the thermostats. These experiences highlight the risk faced by LDCs when selecting vendors and technology for use in delivering OPA program initiatives.

Based on its experience in 2011, ENWIN expects that achieving its CDM targets will remain a significant challenge. In 2011, ENWIN achieved 8% of its net demand savings target where it had planned to achieve 22% in its CDM Strategy. In 2011, ENWIN achieved 27% of its net energy savings target where it had planned to achieve 50% in its CDM Strategy. 2011 was a "start-up" year for OPA CDM program initiatives across the province. The majority of OPA Tier 1 programs were not in place in time for the anticipated January 1 2011 launch. Additionally, ENWIN had to finalize schedules, develop processes, and procure services and resources before it could market the OPA CDM program initiatives to its customers. Delays in the launch of OPA CDM programs and challenges with the online program delivery systems also hindered the timely and efficient delivery of CDM programs throughout the province, including the ENWIN service territory. As a result of these delays, ENWIN did not meet its forecasted 2011 results. Some programs are still not fully in market, further hindering ENWIN's ability to achieve its targets.

Energy savings realized from participation in 2011 initiatives have greater impact on targets than savings realized from initiatives in 2012 and beyond. Making up for lost participation in 2011 will require a greater than one-to-one increase in participation in 2012-2014. To address this fact, ENWIN is currently

re-evaluating its energy savings goals. It is expected that this re-evaluation will contribute to, but not necessarily get all the way to, closing the gap between expected savings and ENWIN's target savings.

ENWIN will continue delivering OPA CDM programs as described in its CDM Strategy. Currently, ENWIN is in the process of reviewing its delivery strategies and identifying any strategy modifications that may be pursued in 2012 and beyond.

ENWIN would like to note and has also communicated with the OPA that some target information is missing within the Final 2011 Results Report. More specifically the missing target information relates to the following Programs:

1. Consumer Program - Residential Demand Response - Incremental Energy Savings (kWh) - kWh quantity to be determined by the OPA .
2. Business Program - Commercial Demand Response - Incremental Peak Demand Savings - 21 kW, Incremental Energy Savings (kWh) - kWh quantity to be determined by the OPA
3. Green Suites - Incremental Energy Savings (kWh) - An additional 1,075,514.58 kWh

This missing target information has not been included in the target information reported within this Annual Report. However, ENWIN anticipates receiving a corrected 2011 Results Report in due course and expects that the savings will be reflected in 2011 final results going forward.

## 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 for electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution licence of ENWIN to require ENWIN, as a condition of its licence, to achieve 117.89 GWh of energy savings and 26.81 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 licences. To comply with the Code requirements, ENWIN submitted its CDM Strategy on November 1, 2010, which provided a high level description of how ENWIN intended to achieve its CDM targets.

The Code also requires a distributor to file an annual report with the Board. This Annual Report is therefore prepared accordingly and covers the period from January 1, 2011 to December 31, 2011.

ENWIN is pleased to report steady progress in 2011 towards the achievement of its Conservation and Demand Management (CDM) targets. 2011 was a "start-up" year for OPA CDM program initiatives across the province. ENWIN needed to finalize schedules, develop processes, and procure services and resources before it could market the Ontario Power Authority (OPA) CDM program initiatives to its customers. Delays in the launch of OPA CDM programs and challenges with the online program delivery systems also hindered the timely and efficient delivery of CDM programs throughout the province, including the ENWIN service territory.

Despite start-up challenges, ENWIN has achieved 27% of its four-year energy target and 8% of its 2014 summer peak demand target. These achievements could not have been met without the strong participation and involvement of Windsor residents, contractors, local businesses and service delivery agents. With over 25,000 CDM program participants in the ENWIN service territory, it is clear that Windsor supports conservation and all of its benefits.

These achievements also exemplify ENWIN's dedication to delivering conservation to its residential, commercial, institutional and industrial customers. ENWIN feels that conservation is an essential part of its core services and can help customers to manage rising energy and operating costs.

ENWIN is committed to working with the Ontario Power Authority (OPA) to deliver CDM programs for the remainder of the current CDM 2011-2014 framework, and beyond.

# 1 Board-Approved CDM Programs

## 1.1 Introduction

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

## 1.2 TOU Pricing

### 1.2.1 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 established 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.

TOU pricing was not available in ENWIN’s service territory in 2011, as ENWIN received an extension from the OEB on implementing TOU pricing.

### 1.2.2 TOU PROGRAM DESCRIPTION

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

**Initiative Frequency:** Year-Round.

**Objectives:** TOU pricing was designed to incent the shifting of energy usage. Therefore peak demand reductions were expected, and energy conservation benefits may also have been 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. However, ENWIN received an extension on implementing TOU pricing to its customers (see EB-2010-0367).

## 1.3 ENWIN’s Application with the OEB

ENWIN has not filed any applications to the Board for Board-approved CDM programs.

In ENWIN’s CDM strategy filed November 1, 2010, ENWIN stated that it expected to achieve its CDM targets through implementation of the OPA province-wide programs (Tier 1), but identified several

potential Board-approved CDM programs that could contribute to the achievement of its energy and demand targets.

In light of the Board's decision on the Toronto Hydro application, and the Board taking a very broad and all-encompassing definition of 'duplicative', ENWIN does not foresee pursuing Board-approved programs at this time, but will continue to evaluate the need and feasibility of these as it tracks progress from province-wide programs; as opportunities present themselves; and as the conditions and requirements for approval evolve.

## 2 OPA-Contracted Province-Wide CDM Programs

### 2.1 Introduction

Effective February 21, 2011, ENWIN entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014. The CDM programs with their associated initiatives are listed in the table below. In addition, programs that were started prior to 2011 that were completed in 2011 are included.

**Table 1: OPA-contracted province-wide CDM programs**

Initiative	Schedule	Date schedule was posted	Customer class
<b>Residential Program</b>			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	All residential rate classes
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes
Retailer Co-op		Jan 26, 2011	All residential rate classes
Residential Demand Response	Schedule B-3	Aug 22, 2011	All residential rate classes
Residential New Construction	Schedule B-2	Jan 26, 2011	All residential rate classes
<b>Commercial &amp; Institutional Program</b>			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General service < 50 kW

<b>Initiative</b>	<b>Schedule</b>	<b>Date schedule was posted</b>	<b>Customer class</b>
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	General service < 50 kW
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General service 50 kW & above
<b>Industrial Program</b>			
Process & System Upgrades	Schedule D-1	May 31, 2011	General service 50 kW & above
Monitoring & Targeting	Schedule D-2	May 31, 2011	General service 50 kW & above
Energy Manager	Schedule D-3	May 31, 2011	General service 50 kW & above
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General service 50 kW & above
Demand Response 3	Schedule D-6	May 31, 2011	General service 50 kW & above
<b>Home Assistance Program</b>			
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes
<b>Pre-2011 Programs completed in 2011</b>			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes

Initiative	Schedule	Date schedule was posted	Customer class
ENWIN Green Suites	n/a	n/a	Hotel and motel industry

Several initiatives that were included in the schedules were not in market in 2011. The OPA communicated that the initiatives listed in the table below were not in market in 2011 and that they represent a very small percentage of the planned energy and demand savings.

**Table 2: OPA-contracted province-wide CDM programs not in market in 2011**

Initiative not in market in 2011	Objective	Status
<b>Residential Program</b>		
Midstream Electronics	The objective of this initiative was to encourage retailers to promote and sell high-efficiency televisions, and for distributors to distribute high-efficiency set top boxes.	Not launched to market
Midstream Pool Equipment	The objective of this initiative was to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Not launched to market
First Nations Program	First Nations programs were to be delivered by the OPA and results would have been attributed to LDCs for reporting.	Not launched to market
Home Energy Audit Tool	This was to be a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Not launched to market
<b>Commercial &amp; Institutional Program</b>		
Direct Service Space Cooling	The objective of this initiative was to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market.

Initiative not in market in 2011	Objective	Status
Demand Response 1	This initiative allowed distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provided DR payments for the actual electricity reduction provided during a demand response event.	There was no customer uptake for this initiative province-wide.
<b>Industrial Program</b>		
Demand Response 1	As above	There was no customer uptake for this initiative province-wide.

The Master CDM Program Agreement includes program change management provisions in Article 3. Collaboration between the OPA and LDCs commenced in 2011 and the Change Management Process was implemented to enhance the saveONenergy program suite. The Change Management Process allowed for modifications to the Master Service Agreement and initiative schedules. The program enhancements were intended 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. Unfortunately, this is a lengthy process and often hinders the implementation of the programs. LDCs, third-party service providers, and customers have delayed participation in programs while waiting for the change management process to finalize crucial program changes. This can cause confusion and lack of trust in the programs among customers and third-party service providers.

## 2.2 Program Descriptions

### 2.2.1 RESIDENTIAL PROGRAM

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

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

**Initiative Frequency:** Year-round

**Objectives:** The objective is to 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 large refrigerators and freezers. Window air conditioners and portable dehumidifiers are also to be picked up if a refrigerator or a freezer is being collected.

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

**Delivery:** The OPA centrally contracted to a third-party service provider for the province-wide marketing, call centre, appliance pick-up and decommissioning processes. ENWIN provided local marketing.

Additional detail is available at the following websites:

- Schedule B-1, Exhibit D  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf)
- SaveONenergy website <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

**Initiative Activities/Progress:** ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs. ENWIN met with Windsor municipal staff to promote its residential programs.

**In-Market Date:** January 1, 2011

### **Lessons Learned:**

- ENWIN has offered the Appliance Retirement initiative (previously The Great Refrigerator Round-Up) since 2006. ENWIN was a pilot site for the initiative in 2006 before it was launched province-wide in 2007. This initiative was approaching market saturation in 2011, especially in ENWIN's service territory.
- ENWIN plans to visit every retailer in its service territory that sells refrigerators to try to boost participant numbers by providing displays and literature to promote the initiative.
- In ENWIN's service territory it is relatively common that scrap metal collectors collect refrigerators left overnight by participants before the OPA's appliance pick-up contractor arrives to pick them up. To avoid this problem, ENWIN now reminds customers to leave refrigerators in their back yard.
- While the OPA and ENWIN have reviewed this initiative to assess whether to include other products, appliances have a natural life cycle and the initiative could not be expected to continually deliver the high level of results in perpetuity. These lower expectations have been taken into account when developing conservation portfolios.
- This initiative was facing some competition from independent retailers and municipalities.
- Results were very responsive to province-wide advertising.

#### **2.2.1.2 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 (AC) and portable dehumidifiers.

**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 and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy-efficient equipment.

**Targeted End Uses:** Window air conditioners and portable dehumidifiers

**Delivery:** The OPA contracted with participating retailers to collect eligible units.

Additional detail is available at the following websites:

- Schedule B-1, Exhibit C  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

**Initiative Activities/Progress:** ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs. ENWIN met with Windsor municipal staff to promote its residential programs.

**In-Market Date:** January 1, 2011

### **Lessons Learned:**

- The spring event had the participation of retailers within ENWIN's service territory. However, the Fall 2011 event had no retailer participation anywhere in the province, therefore savings anticipated by ENWIN did not materialize.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room air conditioners had dropped.
- The initiative may be achieving market saturation.
- The type of unit turned in was very dependent upon what was promoted by the retailers.

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

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

**Initiative Frequency:** Year-round

**Objective:** The objectives of this initiative are 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 systems and products that qualify under the ENERGY STAR program.

**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 central air conditioners that qualify under the ENERGY STAR program. Approved contractors who are qualified through the Heating, Refrigeration, and Air Conditioning Institute (HRAI) replace the equipment.

**Targeted End Uses:** Central air conditioners and furnaces

**Delivery:** OPA contracted the delivery of the program centrally. ENWIN was encouraged by the OPA to convince local contractors to participate in the initiative.

Additional detail is available at the following websites:

- Schedule B-1, Exhibit B  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

**Initiative Activities/Progress:** ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs. ENWIN met with Windsor municipal staff to promote its residential programs.

**In-Market Date:** January 1, 2011

### **Lessons Learned:**

- Channel engagement was a highly effective method of connecting with customers; however channel partners require that rebates be issued promptly to maintain a positive relationship between consumers, contractors, the OPA, and ENWIN.
- There appears to have been spillover to non-HRAI contractors who are ineligible for this initiative. There were cases where smaller independent contractors were offering their own incentives (by discounting their installations to match the value of the OPA incentive) to make the sale. As this occurred outside of the initiative, the savings from these installations were not being attributed to ENWIN.

#### **2.2.1.4 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 discount coupons.

**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 that could be redeemed at participating retailers. Booklets are directly mailed to customers and are also available at point-of-purchase. Downloadable coupons are also available at [www.saveoneenergy.ca](http://www.saveoneenergy.ca).

**Targeted End Uses:** standard compact fluorescent lights (CFLs) that qualify under the ENERGY STAR® program, light fixtures that qualify under the ENERGY STAR® program, lighting control products, weather-stripping, hot water pipe wrap, electric water heater blankets, heavy duty plug-in timers, advanced power bars, clotheslines, baseboard programmable thermostats

**Delivery:** The delivery was OPA contracted centrally for the distribution of the coupon booklets across Ontario. ENWIN distributed the coupons at local events. The OPA entered into agreements with retailers to honour the coupons.

Additional detail is available at the following websites:

- Schedule B-1, Exhibit A  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

**Initiative Activities/Progress:** ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed copies of the coupon booklets to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs. ENWIN met with Windsor municipal staff to promote its residential programs.

**In-Market Date:** January 1, 2011

### **Lessons Learned:**

- Some residents had trouble redeeming coupons with retailers whose staff were not familiar with the program. This caused delays for the customers, which resulted in a less favourable experience with the initiative.
- The downloadable coupons proved to be more successful than the mailed out booklets.
- This Initiative may benefit from an enabler such as a conservation card / loyalty card to increase customer participation.
- The timeframe for retailer submission of redeemed coupons varied from retailer to retailer. This delayed the results reporting, which in turn limited the OPA and ENWIN's abilities to react and respond to initiative performance or changes in consumer behaviour.

#### **2.2.1.5 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 obtain and redeem coupons for instant rebates towards a variety of low-cost, easy-to-install, energy-efficient measures.

**Targeted End Uses:** The same as those for the conservation instant coupon booklet initiative

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

Additional detail is available at the following websites:

- Schedule B-1, Exhibit C  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and

- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

**Initiative Activities/Progress:** ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs. ENWIN met with Windsor municipal staff to promote its residential programs.

**In-Market Date:** January 1, 2011

### **Lessons Learned:**

- The product list has changed very little over the past four years.
- Program evolution, including new products (for example, LED lighting) and reviews of incentive pricing for the coupon initiatives, should be a regular activity to ensure continued consumer interest.
- A review conducted by the LDC/OPA 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.

#### **2.2.1.6 RETAILER CO-OP**

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

**Initiative Frequency:** Year-round

**Objective:** The objective of this initiative is to hold promotional events to encourage customers to purchase energy-efficiency measures (and go beyond the traditional bi-annual coupon events).

**Description:** This initiative provides LDCs with the opportunity to work with retailers in their service area by holding special events at retail locations. These events are typically special promotions that encourage customers to purchase energy-efficiency measures.

**Targeted End Uses:** The same as those for conservation instant coupon booklet initiative

**Delivery:** Retailers applied to the OPA for co-op funding to run special events that promoted energy-efficiency to customers in their stores. The OPA provided ENWIN with a list of retailers who qualified for co-op funding in its service territory as well as details of the proposed special events.

**Initiative Activities/Progress:** This initiative was not specifically promoted in 2011.

**In-Market Date:** January 1, 2011

### **Lessons Learned:**

- ENWIN had limited resources to take part in this initiative, as it was busy ramping up for delivery of all of the OPA programs.
- The availability of retailer and/or ENWIN staff with product knowledge and the ability to conduct demonstrations in store during the events would be an asset.

### 2.2.1.7 RESIDENTIAL NEW CONSTRUCTION PROGRAM (Schedule B-2)

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

**Initiative Frequency:** Year-round

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

**Initiative Activities/Progress:** This initiative was not specifically promoted in 2011.

**In-Market Date:** March 1, 2011

#### **Lessons Learned:**

- There were limited (5) participants in the program province-wide. Because the online application system was a one-to-one relationship, this program was only practical for custom builders who were building one home at a time. Tract builders who might build 250 homes in a single phase would have to submit 250 applications to qualify for incentives. This administrative challenge deterred all tract builders from participating in the program to date.
- Administrative requirements must align with perceived stakeholder payback. Changes are being processed through the OPA's change management process for 2012.

### 2.2.1.8 RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

**Target Customer Type(s):** Residential customers and General Service customers < 50 kW

**Initiative Frequency:** Year-round

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

**Description:** This initiative, also known as *peaksaver*PLUS™, offers participants the option to receive a free programmable thermostat, including installation. Participants also receive access to price and real-time consumption information on an In Home Display (IHD). For the first 8 months of 2011 ENWIN opted to continue to offer the previous version of the *peaksaver*® load control program, which offered a programmable thermostat and a \$25 bill credit. The OPA referred to the continuation of the previous *peaksaver*® program into 2011 as the *peaksaver*®Extension. After August 2011, the Extension ended and the program (including marketing) ceased until new IHD products became available.

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

**Delivery:** ENWIN recruited customers and procured technology.

Additional detail is available at the following websites:

- Schedule B-1, Exhibit C  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/SCHED\\_2011\\_ResDR\\_B\\_3\\_110727%28MJB%29v15\\_redacted.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

**Initiative Activities/Progress:** ENWIN offered the *peaksaver*<sup>®</sup>Extension, but was not in market with *peaksaver*PLUS<sup>™</sup> in 2011.

**In-Market Date:** March 1, 2011

### **Lessons Learned:**

- The schedule for *peaksaver*PLUS<sup>™</sup> was posted in August 2011, but this did not provide adequate time for product procurement for 2011 or the early part of 2012. The product procurement process uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, ENWIN could not be in market with the Peaksaver Plus program until 2012.
- ENWIN faced challenges with the original *peaksaver*<sup>®</sup> initiative that made this initiative problematic. Challenges included a problem with the communication frequency between the thermostats and the OPA's demand response activation equipment, and a recall of faulty batteries within the thermostats. The communication problem has since been resolved by the OPA.
- There was a technical issue with some programmable thermostats that ENWIN had selected for the original *peaksaver*<sup>®</sup> initiative. Considerable effort was made by ENWIN to notify the affected customers of the defective thermostats immediately upon becoming aware of the safety risk. A long-term solution has since been found and all affected customers will again be contacted by ENWIN and given the opportunity to replace their faulty thermostats. This experience highlights the risk faced by LDCs when selecting vendors and technology for use in OPA program initiatives.
- Introduction of new technology required incentives for the development of such technology. Appropriate lead times for ENWIN to have conducted analysis and assessment, product procurement, and testing and integration into the smart meter environment were also required. Making seemingly minor changes to provincial technical specifications could create significant issues when LDCs attempted to implement the solution in their own unique environment.
- Where a provincial solution does not apply to all participants, attention to addressing LDC specific concerns is needed.

## **2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM**

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

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

**Initiative Frequency:** Year-round

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

**Description:** ERII offers customers financial incentives to upgrade existing equipment or processes to more energy-efficient equipment or processes. Upgrade projects can be classified into the following program tracks:

- a) Prescriptive projects, where prescribed measures replace associated required base case equipment;
- b) Engineered projects, where energy and demand savings and incentives are calculated for associated measures; or
- c) Custom projects for energy efficiency upgrades not covered under prescriptive or engineering streams.

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

**Delivery:** The initiative was delivered by ENWIN.

Additional detail is available at the following websites:

- Schedule C-2  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

**Initiative Activities/Progress:** ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs and spoke to business owners about the business programs when applicable. ENWIN hosted two information sessions with vendors and large customers to promote the business programs. ENWIN presented on the business programs at the local Ontario Electrical League meeting.

**In-Market Date:** February 1, 2011

### **Lessons Learned:**

- ERII (previously Equipment Replacement Incentive Program – ERIP) was offered by ENWIN for many years leading up to 2011. It is a high-performing, cost-effective program, and there were several pre-2011 projects completed in 2011 (via ERIP).
- A major challenge for the ERII program in 2011 was payment delays. The centralized electronic processes were not ready as required by the OPA’s Master Agreement. The delayed availability of these automated processes, coupled with a greater than expected volume of pre-2011 projects being completed province-wide in 2011, caused considerable payment delays by the OPA. Based on the lessons learned in the 2011 process, the centralized process review used by the OPA for 2012 project payment was streamlined.
- In March 2011, the revised iCON system was launched by the OPA. This was the major online application system implemented to aid the 2011-2014 ERII application process. With system applications of this size and functionality, it was expected that there would be various issues identified at the time of the release and in the early stages before the system was “ready for market.” Unfortunately, the resolution of these issues, with the corresponding time lags and

workarounds, was seen to be a barrier to some customers' participation in the 2011 program year. In addition, there were also on-going issues and limitations with the back-end CRM system that affected ENWIN's ability to effectively review and approve applications.

- Another challenge was the significant time lapse between the former ERIP program and the new ERII program. Some of ENWIN's customers could not wait until the new program became available and proceeded with their retrofits without receiving the incentives they would otherwise have been entitled to and without ENWIN receiving credit for the associated savings from the project toward its targets. There should have been a smoother transition between the end of ERIP and the launch of ERII to reduce customer confusion, delays, frustration, and mistrust.

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

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

**Initiative Frequency:** Year-round

**Objective:** The objective of this initiative is to offer the free installation of eligible lighting and water-heating measures valued at up to \$1,000 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 Install Lighting Initiative targets customers in the general service <50kW account category. This Initiative offers turnkey installation of energy-efficient lighting and electric hot water heating measures with a value up to \$1,000 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment that the customer chooses to have installed beyond the initial \$1,000 limit.

**Target End Uses:**

**Delivery:** Participants could enrol directly with ENWIN, or would be contacted by ENWIN's service delivery agent.

Additional detail is available at the following websites:

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

**Initiative Activities/Progress:** ENWIN hosted two information sessions with vendors and large customers to promote the business programs. ENWIN presented on the business programs at the local Ontario Electrical League meeting. ENWIN's service delivery agent did outbound calling to promote the program directly to customers. ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs and spoke to business owners about the business programs when applicable.

**In-Market Date:** May 1, 2011

## Lessons Learned:

- The Direct Install Lighting and Water Heating Initiative was a continuation of the Power Saving Blitz Initiative (PSB) offered by ENWIN from 2008-2010. Successful execution of the previous rendition of this initiative resulted in diminished potential for the 2011-2014 initiative. Approximately 50% of ENWIN's customers that are eligible have participated in PSB or DIL, making it increasingly difficult to get additional uptake.
- The cost of materials experienced price volatility, reducing the margins for the electrical contractors participating in the program as installers and this led to a reduction in vendor channel participation.
- To address these issues, the LDCs have been working with the OPA in 2012 through its change management process to:
  - Extend the target initiative population to include small agricultural customers;
  - Increase the incentive envelope of \$1,000 to \$1,500 to ensure ongoing marketability of the program; and
  - Review the eligible measure price list to support contractor participation.
- ENWIN and its service delivery agent expect to do extra outreach in 2012 to try to attract the remaining customer base to the program.

### 2.2.2.3 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 project phases:

- a) Scoping study phase,
- b) Investigation phase,
- c) Implementation phase, and
- d) Hand off/completion phase.

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

Additional detail is available at the following websites:

- Schedule C-6  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

**Initiative Activities/Progress:** ENWIN hosted two information sessions with vendors and large customers to promote the business programs. ENWIN presented on the business programs at the local

Ontario Electrical League meeting. ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs and spoke to business owners about the business programs when applicable.

**In-Market Date:** March 1, 2011

### **Lessons Learned:**

- There was no customer uptake for this initiative province-wide. It is suspected that the scope of the initiative being limited to space cooling contributed to the lack of participation. Accordingly chilled water systems used for other purposes should be made eligible and considered through the OPA's change management process.
- The customer expectation is that the program be expanded to include broader building improvements for a more holistic approach to building recommissioning.

#### **2.2.2.4 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 and renovators of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation, and other measures.

**Description:** The New Construction Initiative provides incentives for new buildings and major renovations to existing buildings that exceed existing building codes and standards for energy efficiency. This is a continuation of the High Performance New Construction program previously delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010. The initiative uses both a prescriptive and custom approach.

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

Additional detail is available at the following websites:

- Schedule C-4 <http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewConstructionInitiativeV2.pdf> and
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

**Initiative Activities/Progress:** A contract with a third party service provider to deliver the program is currently being developed and ENWIN wasn't able to have program running until 2012.

**In-Market Date:** This initiative was not in market in ENWIN's service territory

## Lessons Learned:

- For 2011, new industry participation was limited due to the delays in the redesign of certain aspects of the initiative, such as:
  - 2011 prescriptive incentives needed to be aligned with ERII incentives;
  - In the cases of delivering large projects (i.e. custom applications), 2011 participation was limited due to 1) building code changes and 2) level of documentation required.

### 2.2.2.5 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, and agricultural facilities and multi-family buildings 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 with incentives for the completion of energy audits of electricity consuming equipment located in their facility. Energy audits include development of energy baselines, use assessments, and performance monitoring and reporting.

**Targeted End Uses:** Various

**Delivery:** ENWIN delivered.

Additional detail is available at the following websites:

- Schedule C-1  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

**Initiative Activities/Progress:** ENWIN hosted two information sessions with vendors and large customers to promote the business programs. ENWIN presented on the business programs at the local Ontario Electrical League meeting. ENWIN phoned consulting firms that do building audits in its service territory to promote the Audit Initiative. ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events. ENWIN attended the Windsor Home Show to promote its residential programs and spoke to business owners about the business programs when applicable.

**In-Market Date:** June 1, 2011

## Lessons Learned:

- Customer uptake in the beginning of 2011 was slow, and increased later in the year. Hence, little if any savings from projects resulting from audits were realized in 2011, but projects are expected for 2012.

- Customers expected a greater connection with other CDM initiatives as a result of completing the Energy Audit. The initiative should be reviewed under the OPA's change management process for the means to readily incent participants with audits in hand to implement other electricity savings initiatives.

## **2.2.3 INDUSTRIAL PROGRAM**

### **2.2.3.1 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 that 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 parts:

- a) Preliminary engineering study,
- b) Detailed engineering study, and
- c) Capital incentives.

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, or
- c) A one-year pay back.

**Targeted End Uses:** Processes and systems

**Delivery:** ENWIN delivered with Key Account Management support

Additional detail is available at the following websites:

- Schedule D-1  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20D-1%20Process%20and%20Systems%20Upgrades%20Initiative.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-1%20Process%20and%20Systems%20Upgrades%20Initiative.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

**Initiative Activities/Progress:** ENWIN hosted two information sessions with vendors and large customers to promote the business programs. ENWIN presented on the business programs at the local

Ontario Electrical League meeting. ENWIN was able to hire a Key Account Manager in November of 2011 who began calling customers and setting up face-to-face meetings to promote the industrial programs. ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events.

**In-Market Date:** November 1, 2011

#### **Lessons Learned:**

- The PSUI program targets large customers that are undertaking large capital projects. There is typically a long sales cycle to sell these projects, and then a long project development cycle. As such, results from PSUI did not appear in 2011. Limited results are expected to appear in 2012. The majority of the results are expected in 2013-2014, with a much-reduced benefit to cumulative energy savings targets.
- Steps are being taken in the 2012 OPA change management process to simplify and streamline the micro-project application process and to allow smaller projects to be directed to the ERIL stream.
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. Attempts are being made through the OPA's change management process in 2012 to simplify the document while still protecting the ratepayer.
- With the considerable customer interest in on-site load displacement projects, the initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI.

#### **2.2.3.2 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 to sustain the target level of savings 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 then be able to use historical energy consumption performance to analyze and set targets.

**Targeted End Uses:**

**Delivery:** ENWIN delivered with Key Account Management support

Additional detail is available at the following websites:

- Schedule D-2  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

**Initiative Activities/Progress:** ENWIN hosted two information sessions with vendors and large customers to promote the business programs. ENWIN presented on the business programs at the local Ontario Electrical League meeting. ENWIN was able to hire a Key Account Manager in November of 2011 who began calling customers and setting up face-to-face meetings to promote the industrial programs. ENWIN promoted its CDM programs on its website. ENWIN had a staff training session to educate staff on the CDM programs, so that they could promote them to the public and answer any questions. ENWIN printed program promotional brochures to have available at its office and to distribute at local events.

**In-Market Date:** November 1, 2011

### **Lessons Learned:**

- The M&T initiative was originally targeted at larger customers with the capacity to review the M&T data. This review required the customer facility to employ an energy manager, or a person with equivalent qualifications, which was a barrier for some customers. Through the OPA's change management process in 2012, changes are being made to both the M&T schedule and ERII to allow smaller facilities to employ M&T systems.
- Like PSUI, the M&T Initiative requires a lot of time to plan and implement, resulting in significant delays in realizing savings from the initiative.
- ENWIN has had no uptake in this initiative to date.

#### **2.2.3.3 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 ENWIN 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. The initiative also provides funding for an off-site roving energy manager who could be engaged by ENWIN to provide services for a number of customers. The role of the energy manager is to take control of a facility's energy use by monitoring performance, leading awareness programs, identifying opportunities for energy consumption improvement, and spearheading projects. Participants are funded for 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. ENWIN was eligible to receive funding of up to \$120,000 for a Roving Energy Manager plus \$8,000 for expenses.

#### **Targeted End Uses:**

Additional detail is available at the following websites:

- Schedule D-3  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf) and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

**In-Market Date:** This initiative was not in market in ENWIN's service territory in 2011.

### **Lessons Learned:**

- It was difficult to find qualified energy managers who were willing to sign on for a contract that was limited to only one year. The initiative should be changed to allow LDCs to contract for energy managers through consulting companies who have qualified staff that could provide the services on a one-year contract while still maintaining job security for their specialized staff.

#### **2.2.3.4 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 ENWIN the opportunity to access funding for the employment of a KAM in order to support ENWIN in fulfilling its obligations related to the PSUI.

**Description:** The KAM is considered to be a key element in assisting the customer in overcoming traditional barriers related to energy management and help them achieve savings. The KAM is expected to achieve these results by building relationships and becoming a significant resource of knowledge to the customer.

**Targeted End Uses:** Process and system changes

**Delivery:** LDC delivered

Additional detail is available at the following website:

- ScheduleD-4  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/projects/\\_programs/pdfs/PSUI%20Initiative%20Schedule%20D-4.Key%20Account%20Manager.20110322.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/projects/_programs/pdfs/PSUI%20Initiative%20Schedule%20D-4.Key%20Account%20Manager.20110322.pdf)

**Initiative Activities/Progress:** ENWIN hired a key account manager in November of 2011 who began calling customers and setting up face-to-face meetings to promote the industrial programs.

**In-Market Date:** November 1, 2011

### **Lessons Learned:**

- Customers appreciated dealing with a single contact to interface with ENWIN. The KAM was able to fill this role as a resource that had both the technical and business background to communicate easily with the customer and ENWIN. Finding this type of skill set was difficult, resulting in longer lead times to acquire the right resource.
- As with energy managers, it was difficult to find qualified key account managers who were willing to sign on for a contract that was limited to only one year. Despite this fact, ENWIN was able to secure a KAM in November 2011.
- Projects that are being worked on with customers by the KAM take a long lead time to get to the in-service stage. This points to an additional problem with having the KAM on a one-year contract and will result in many of the projects not being completed by 2014, even though they

are under way. As a result, ENWIN will not receive credit towards its energy and demand savings targets from these large long-term projects.

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

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

**Initiative Frequency:** Year-round

**Objective:** This initiative provides participants with demand response (DR) payments to compensate them for making available electricity DR during a DR event.

**Description:** Demand Response 3 (DR3) is a DR initiative for commercial and industrial customers with demand of 50 kW or greater willing to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This initiative provides regular payments to participants to be on standby and energy payments for the actual energy 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:** Demand peak-reducing measures and process changes at commercial and industrial facilities.

**Delivery:** DR3 was delivered by demand response providers (DRPs), under contract to the OPA. The OPA administered contracts with all DRPs as well as direct participants that provided in excess of 5 MW of demand response capacity. The OPA provided administration including settlement, measurement and verification, and dispatch. ENWIN was responsible for outreach and marketing efforts.

Additional detail is available at the following website:

- Schedule D-6  
[http://www.powerauthority.on.ca/sites/default/files/new\\_files/industry\\_stakeholders/current\\_electricity\\_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf](http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf)  
and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

**Initiative Activities/Progress:** ENWIN partnered with Rodan to deliver DR3 and Rodan promoted the program through promotion, phone calls and face-to-face meetings with prospective participants.

**In-Market Date:** January 1, 2011

#### **Lessons Learned:**

- Customer data was not provided by the OPA on an individual customer basis due to contractual requirements with the aggregators. This limited ENWIN's ability to effectively market to prospective participants.
- In April 2011 the Independent Electricity System Operator (IESO) reduced ENWIN's service class energy rates by 50%, as it was deemed to be in a discounted region. This affected ENWIN's ability to participate in the program, as there was no longer a reasonable payback for interested customers.

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

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

**Initiative Frequency:** Year-round

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

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

**Targeted End Uses:** End use measures based on the results of the audits

**In-Market Date:** This initiative was not in market in ENWIN's service territory in 2011.

### **Lessons Learned:**

- This initiative schedule was finalized later (May 2011) than the rest of the OPA initiatives and ENWIN did not have the initiative in market in 2011.
- Centralized payment processes were not developed in 2011 and were not in place until mid-2012. As a result, ENWIN delayed its launch to market.
- Rule changes to the program mid-stream have long-term impact to the program. Releasing a program to market prematurely should be avoided.
- In the residential sector, a program that involves significant paperwork is less likely to be successful.

## **2.2.5 PRE-2011 PROGRAMS COMPLETED IN 2011**

### **2.2.5.1 ELECTRICITY RETROFIT INCENTIVE PROGRAM**

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

**Initiative Frequency:** Year-round

**Objective:** Refer to section 2.2.2.1

**Description:** Refer to section 2.2.2.1

**Targeted End Uses:** Refer to section 2.2.2.1

**Delivery:** Refer to section 2.2.2.1

**Initiative Activities/Progress:** ENWIN called all customers that had outstanding ERIP applications to remind them that their project completion deadline was coming up.

### **2.2.5.2 ENWIN GREEN SUITES**

**Target Customer Type(s):** Hotels and motels in the ENWIN service territory

**Initiative Frequency:** Year-round

**Objective:** Green Suites helped drive local hotels to more sustainable energy practices. While programs such as ERIP can help offset retrofit costs, a lack of understanding of the industry specific options is limiting participation in the broader provincial program. Green Suites offered a systematic marketing approach that targeted both hotels and motels to help push the conservation behavior throughout Windsor.

**Description:** This Initiative was specific to ENWIN's Service Area.

**Targeted End Uses:** Energy efficient measures including lighting, motors, cooling equipment and other measures

**Delivery:** ENWIN delivered with a third party service provider

**Initiative Activities/Progress:**

By May 31st 2010, six applications were received by various Windsor hotels with work intended to be completed by the May 31st 2011 deadline. In 2011, ENWIN contacted these applicants by phone and in person to ensure that projects were completed and invoices were submitted on time.

**Lesson Learned:**

- A program like this needs regular follow-up. Participants are interested in reducing energy use and receiving rebates, but often don't have time to work through the process or consult with their engineers.
- For hotels and motels that are part of chains, product selection is done at a corporate level, not locally, which minimized the products from our offering that the Windsor hotels could purchase.
- Assisting hotel owners with coming up with an energy management plan as opposed to just discounted product would help them do more long term forecasting and budget accordingly for programs like this.
- Because of its credibility in the community, having ENWIN approach a potential participant directly has a greater impact than having a third party contractor contact a potential participant on a cold-call basis.
- Smaller hotels, motels and inns were not able to reach the minimum requirements to qualify for the program.
- The Green Suites model demonstrated that one-on-one outreach, education opportunities and readily available program support are invaluable for industries like hotels where the barriers of time, capacity and upfront capital are common.

## 2.3 Participation

**Table 3: Participation in OPA-contracted province-wide CDM programs**

#	Initiative	Activity unit	Uptake/ participation units
<b>Residential Program</b>			
1	Appliance Retirement	Appliances	400
2	Appliance Exchange	Appliances	97
3	HVAC Incentives	Equipment	2,380
4	Conservation Instant Coupon Booklet	Coupons	7,800
5	Bi-Annual Retailer Event	Coupons	13,527
6	Retailer Co-op	Items	0
7	Residential Demand Response	Devices	621
10	Residential New Construction	Houses	0
<b>Commercial &amp; Institutional Program</b>			
11	Efficiency: Equipment Replacement	Projects	39
12	Direct Install Lighting	Projects	508
14	Existing Building Commissioning Incentive	Buildings	0
15	New Construction and Major Renovation Incentive	Buildings	0
16	Energy Audit	Audits	0
17	Commercial Demand Response (part of the Residential program schedule)	Devices	0
19	Demand Response 3 (part of the Industrial program schedule)	Facilities	3
<b>Industrial Program</b>			
20	Process & System Upgrades	Projects	0
	a) preliminary engineering study		0

#	Initiative	Activity unit	Uptake/ participation units
	b) detailed engineering study		0
	c) capital incentives		0
21	Monitoring & Targeting	Projects	0
22	Energy Manager	Managers	0
23	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	8
25	Demand Response 3	Facilities	1
<b>Home Assistance Program</b>			
26	Home Assistance Program	Units	0
<b>Pre 2011 Programs Completed in 2011</b>			
27	Electricity Retrofit Incentive Program	Projects	39
28	High Performance New Construction	Projects	1
29	Toronto Comprehensive	Projects	0
30	Multifamily Energy Efficiency Rebates	Projects	0
31	Data Centre Incentive Program	Projects	0
32	ENWIN Green Suites	Projects	3

## 2.4 Spending

The following details the funds used by ENWIN in the one-year period applicable to the Annual Report, on each of the OPA-Contracted Province-Wide CDM Programs offered in its service area.

**Table 4: Spending for OPA-contracted province-wide CDM programs**

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
<b>Residential Program</b>						
1	Appliance Retirement	\$49,438				\$49,438
2	Appliance Exchange	\$49,438				\$49,438
3	HVAC Incentives	\$49,438				\$49,438
4	Conservation Instant Coupon Booklet	\$49,438				\$49,438
5	Bi-Annual Retailer Event	\$49,438				\$49,438
6	Retailer Co-op					\$0
7a	Residential Demand Response		\$0	\$0	n/a	\$0
10	Residential New Construction					\$0
<b>Business Program</b>						
11	Efficiency: Equipment Replacement	\$136,006	n/a	\$101,285	n/a	\$237,291

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
12	Direct Install Lighting	\$124,770	\$150,150	\$492,698	n/a	\$767,618
14	Existing Building Commissioning Incentive					\$0
15	New Construction and Major Renovation Initiative					\$0
16	Energy Audit		n/a	\$7,715	n/a	\$7,715
17	Commercial Demand Response (part of the Residential program schedule)					\$0
19	Demand Response 3 (part of the Industrial program schedule)	\$120,686				\$120,686
<b>Industrial Program</b>						
20	Process & System Upgrades	\$24,388				\$24,388
21	Monitoring & Targeting	\$8,129				\$8,129
22	Key Account Energy Manager	\$27,765			\$27,765	\$55,530
	Energy Manager	\$8,129				\$8,129
23	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)			\$49,641		\$49,641

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
25	Demand Response 3	\$8,129				\$8,129
<b>Home Assistance Program</b>						
26	Home Assistance Program	\$24,783				\$24,783
<b>Pre-2011 programs completed in 2011</b>						
27	ERIP		n/a	\$902,954	n/a	\$902,954
28	ENWIN Green Suites			\$12,189		\$12,189
	<b>Total province-wide CDM programs</b>	\$729,975	\$150,150	\$1,566,482	\$27,765	\$2,474,371
	Residential Demand Response – peaksaver extension period		\$318,146	\$17,200		\$335,346

## 2.5 Evaluation

### 2.5.1 EVALUATION FINDINGS

The evaluation findings in Table 5 are those of the final evaluations of each initiative as reported by independent third-party evaluators.

**Table 5: Evaluation Findings**

#	Initiative	Evaluation findings
<b>Residential Program</b>		
1	Appliance Retirement	<ul style="list-style-type: none"> <li>• Overall participation continues to decline year over year               <ul style="list-style-type: none"> <li>○ Participation declined 17% from 2010 (from over 67,000 units in 2010 to over 56,000 units in 2011)</li> </ul> </li> <li>• 97% of net resource savings achieved through the home pick-up stream               <ul style="list-style-type: none"> <li>○ Measure Breakdown: 66% refrigerators, 30% freezers, 4% Dehumidifiers and window air conditioners</li> </ul> </li> <li>• 3% of net resource savings achieved through the Retailer pick-up stream               <ul style="list-style-type: none"> <li>○ Measure Breakdown: 90% refrigerators, 10% freezers</li> </ul> </li> <li>• Net-to-Gross ratio for the initiative was 50%               <ul style="list-style-type: none"> <li>○ Measure-level free ridership ranges from 82% for the retailer pick-up stream to 49% for the home pick-up stream</li> <li>○ Measure-level spillover ranges from 3.7% for the retailer pick-up stream to 1.7% for the home pick-up stream</li> </ul> </li> </ul>
2	Appliance Exchange	<ul style="list-style-type: none"> <li>• Overall eligible units exchanged declined by 36% from 2010 (from over 5,700 units in 2010 to over 3,600 units in 2011)               <ul style="list-style-type: none"> <li>○ Measure Breakdown: 75% window air conditioners, 25% dehumidifiers</li> </ul> </li> <li>• Dehumidifiers and window air conditioners contributed almost equally to the net</li> </ul>

#	Initiative	Evaluation findings
		<p>energy savings achieved</p> <ul style="list-style-type: none"> <li>○ Dehumidifiers provide more than three times the energy savings per unit than window air conditioners</li> <li>● Window air conditioners contributed to 64% of the net peak demand savings achieved</li> <li>● Approximately 96% of consumers reported having replaced their exchanged units (as opposed to retiring the unit)</li> <li>● Net-to-Gross ratio for the initiative is consistent with previous evaluations (51.5%)</li> </ul>
3	HVAC Incentives	<ul style="list-style-type: none"> <li>● Total air conditioner and furnace installations increased by 14% (from over 95,800 units in 2010 to over 111,500 units in 2011) <ul style="list-style-type: none"> <li>○ Measure Breakdown: 64% furnaces, 10% tier 1 air conditioners (SEER 14.5) and 26% tier 2 air conditioners (SEER 15)</li> <li>○ Measure breakdown did not change from 2010 to 2011</li> </ul> </li> <li>● The HVAC Incentives initiative continues to deliver the majority of both the energy (45%) and demand (83%) savings in the consumer program <ul style="list-style-type: none"> <li>○ Furnaces accounted for over 91% of energy savings achieved for this initiative</li> </ul> </li> <li>● Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in 2011) <ul style="list-style-type: none"> <li>○ Increase due in part to the removal of programmable thermostats from the program, and an increase in the net-to-gross ratio for both Furnaces and Tier 2 air conditioners (SEER 15)</li> </ul> </li> </ul>
4	Conservation Instant Coupon Booklet	<ul style="list-style-type: none"> <li>● Customers redeemed nearly 210,000 coupons, translating to nearly 560,000 products <ul style="list-style-type: none"> <li>○ Majority of coupons redeemed were downloadable (~40%) or LDC-branded</li> </ul> </li> </ul>

#	Initiative	Evaluation findings
		<p>(~35%)</p> <ul style="list-style-type: none"> <li>○ Majority of coupons redeemed were for multi-packs of standard spiral CFLs (37%), followed by multi-packs of specialty CFLs (17%)</li> <li>● Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings</li> <li>● Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed</li> </ul>
5	Bi-Annual Retailer Event	<ul style="list-style-type: none"> <li>● Customers redeemed nearly 370,000 coupons, translating to over 870,000 products <ul style="list-style-type: none"> <li>○ Majority of coupons redeemed were for multi-packs of standard spiral CFLs (49%), followed by multi-packs of specialty CFLs (16%)</li> </ul> </li> <li>● Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings <ul style="list-style-type: none"> <li>○ Standard CFLs and heavy duty outdoor timers were reintroduced to the initiative in 2011 and contributed more than 64% of the initiative's 2011 net annual energy savings</li> <li>○ While the volume of coupons redeemed for heavy duty outdoor timers was relatively small (less than 1%), the measure accounted for 10% of net annual savings due to high per unit savings</li> </ul> </li> <li>● Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed.</li> </ul>
6	Retailer Co-op	<ul style="list-style-type: none"> <li>● Initiative was not evaluated in 2011 due to low uptake. Verified Bi-Annual Retailer Event per unit assumptions and free-ridership rates were used to calculate net resource savings</li> </ul>
7	Residential Demand Response	<ul style="list-style-type: none"> <li>● Approximately 20,000 new devices were installed in 2011 <ul style="list-style-type: none"> <li>○ 99% of the new devices enrolled controlled residential central AC (CAC)</li> </ul> </li> </ul>

#	Initiative	Evaluation findings
		<ul style="list-style-type: none"> <li>• 2011 only saw 1 atypical event (in both weather and timing) that had limited participation across the province               <ul style="list-style-type: none"> <li>○ The ex ante impact developed through the 2009/2010 evaluations was maintained for 2011; residential CAC: 0.56 kW/device, commercial CAC: 0.64 kW/device, and Electric Water Heaters: 0.30 kW/device</li> </ul> </li> </ul>
10	Residential New Construction Initiative	<ul style="list-style-type: none"> <li>• Initiative was not evaluated in 2011 due to limited uptake</li> <li>• Business case assumptions were used to calculate savings</li> </ul>
<b>Commercial &amp; Institutional Program</b>		
11	Efficiency: Equipment Replacement	<ul style="list-style-type: none"> <li>• Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks</li> <li>• Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes               <ul style="list-style-type: none"> <li>○ On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions</li> <li>○ Low realization rates for engineered lighting projects due to overstated operating hour assumptions</li> </ul> </li> <li>• Custom non-lighting projects suffered from process issues such as: the absence of required M&amp;V plans, the use of inappropriate assumptions , and the lack of adherence to the M&amp;V plan</li> <li>• The final realization rate for summer peak demand was 94%               <ul style="list-style-type: none"> <li>○ 84% was a result of different methodologies used to calculate peak demand savings</li> <li>○ 10% due to the benefits from reduced air conditioning load in lighting retrofits</li> </ul> </li> </ul>

#	Initiative	Evaluation findings
		<ul style="list-style-type: none"> <li>• Overall net-to-gross ratios in the low 70's represent an improvement over the 2009 and 2010 ERIP program where net-to-gross ratios were in the low 60's and low 50's, respectively.</li> <li>• Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios</li> </ul>
12	Direct Install Lighting	<ul style="list-style-type: none"> <li>• Though overall performance is above expectations, participation continues to decline year over year as the initiative reaches maturity</li> <li>• 70% of province-wide resource savings persist to 2014 <ul style="list-style-type: none"> <li>○ Over 35% of the projects for 2011 included at least one CFL measure</li> <li>○ Resource savings from CFLs in the commercial sector only persist for the industry standard of 3 years</li> </ul> </li> <li>• Since 2009 the overall realization rate for this program has improved <ul style="list-style-type: none"> <li>○ 2011 evaluation recorded the highest energy realization rate to date at 89.5%</li> <li>○ The hours of use values were held constant from the 2010 evaluation and continue to be the main driver of energy realization rate</li> <li>○ Lights installed in "as needed" areas (e.g., bathrooms, storage areas) were determined to have very low realization rates due to the difference in actual energy saved vs. reported savings</li> </ul> </li> </ul>
14	Existing Building Commissioning Incentive	<ul style="list-style-type: none"> <li>• Initiative was not evaluated in 2011, no completed projects in 2011</li> </ul>
15	New Construction and Major Renovation Initiative	<ul style="list-style-type: none"> <li>• Initiative was not evaluated in 2011 due to low uptake</li> <li>• Assumptions used are consistent with preliminary reporting based on the 2010 Evaluation findings and consultation with the C&amp;I Work Group (100% realization rate and 50% net-to-gross ratio)</li> </ul>

#	Initiative	Evaluation findings
16	Energy Audit	<ul style="list-style-type: none"> <li>The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions.</li> </ul>
17	Commercial Demand Response (part of the Residential program schedule)	<ul style="list-style-type: none"> <li>See residential demand response (#7)</li> </ul>
19	Demand Response 3 (part of the Industrial program schedule)	<ul style="list-style-type: none"> <li>See Demand Response 3 (#25)</li> </ul>
<b>Industrial Program</b>		
20	Process & System Upgrades	<ul style="list-style-type: none"> <li>Initiative was not evaluated in 2011, no completed projects in 2011</li> </ul>
21	Monitoring & Targeting	<ul style="list-style-type: none"> <li>Initiative was not evaluated in 2011, no completed projects in 2011</li> </ul>
22	Energy Manager	<ul style="list-style-type: none"> <li>Initiative was not evaluated in 2011, no completed projects in 2011</li> </ul>
23	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	<ul style="list-style-type: none"> <li>See Efficiency: Equipment Replacement (#11)</li> </ul>
25	Demand Response 3	<ul style="list-style-type: none"> <li>Program performance for Tier 1 customers increased with DR-3 participants providing 75% of contracted MW for both sectors <ul style="list-style-type: none"> <li>Industrial customers outperformed commercial customers by providing 84% and 76% of contracted MW, respectively</li> </ul> </li> <li>Program continues to diversify but still remains heavily concentrated with less than 5% of the contributors accounting for the majority (~60%) of the load reductions.</li> <li>By increasing the number of contributors in each settlement account and implementation of the new baseline methodology the performance of the program is expected to increase</li> </ul>

#	Initiative	Evaluation findings
<b>Home Assistance Program</b>		
26	Home Assistance Program	<ul style="list-style-type: none"> <li>• Initiative was not evaluated in 2011 due to low uptake</li> <li>• Business Case assumptions were used to calculate savings</li> </ul>
<b>Pre-2011 Programs completed in 2011</b>		
27	Electricity Retrofit Incentive Program	<ul style="list-style-type: none"> <li>• Initiative was not evaluated</li> <li>• Net-to-Gross ratios used are consistent with the 2010 evaluation findings (multifamily buildings 99% realization rate and 62% net-to-gross ratio and C&amp;I buildings 77% realization rate and 52% net-to-gross ratio)</li> </ul>
28	High Performance New Construction	<ul style="list-style-type: none"> <li>• Initiative was not evaluated</li> <li>• Net-to-Gross ratios used are consistent with the 2010 evaluation findings (realization rate of 100% and net-to-gross ratio of 50%)</li> </ul>
29	Toronto Comprehensive	<ul style="list-style-type: none"> <li>• Initiative was not evaluated</li> <li>• Net-to-Gross ratios used are consistent with the 2010 evaluation findings</li> </ul>
30	Multifamily Energy Efficiency Rebates	<ul style="list-style-type: none"> <li>• Initiative was not evaluated</li> <li>• Net-to-Gross ratios used are consistent with the 2010 evaluation findings</li> </ul>
31	Data Centre Incentive Program	<ul style="list-style-type: none"> <li>• Initiative was not evaluated</li> </ul>
32	ENWIN Green Suites	<ul style="list-style-type: none"> <li>• Initiative was not evaluated</li> </ul>

## 2.5.2 EVALUATION RESULTS

The results in Table 6 are those of the final evaluations of each initiative as reported by independent third-party evaluators.

**Table 6: Evaluation Results**

#	Initiative	NTG	Gross Savings		Net Savings		Contribution to Targets	
			Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
<b>Residential Program</b>								
1	Appliance Retirement	51%	45	333,986	22	165,482	22	661,826
2	Appliance Exchange	52%	19	22,888	10	11,796	3	41,569
3	HVAC Incentives	60%	1,160	2,183,396	698	1,305,397	698	5,221,590
4	Conservation Instant Coupon Booklet	114%	16	265,400	18	292,537	18	1,170,146
5	Bi-Annual Retailer Event	113%	23	418,075	26	456,748	26	1,826,991
6	Retailer Co-op	-	0	0	0	0	0	0
7	Residential Demand Response	-	348	0	348	0	0	0
10	Residential New Construction	-	0	0	0	0	0	0
<b>Commercial &amp; Institutional Program</b>								
11	Efficiency: Equipment	73%	342	1,759,967	250	1,326,534	250	5,306,138

#	Initiative	NTG	Gross Savings		Net Savings		Contribution to Targets	
			Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
	Replacement							
12	Direct Install Lighting	93%	618	1,844,874	662	1,713,038	357	5,998,804
14	Existing Building Commissioning Incentive	-	0	0	0	0	0	0
15	New Construction and Major Renovation Incentive	-	0	0	0	0	0	0
16	Energy Audit	-	0	0	0	0	0	0
17	Commercial Demand Response (part of the Residential program schedule)		0	0	0	0	0	0
19	Demand Response 3 (part of the Industrial program schedule)		310	9,180	234	9,180	0	9,180
<b>Industrial Program</b>								
20	Process & System Upgrades	-	0	0	0	0	0	0
21	Monitoring & Targeting	-	0	0	0	0	0	0

#	Initiative	NTG	Gross Savings		Net Savings		Contribution to Targets	
			Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
22	Energy Manager	-	0	0	0	0	0	0
23	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	72%	86	554,667	62	414,515	62	1,658,058
25	Demand Response 3		100	4,947	84	4,947	0	4,947
<b>Home Assistance Program</b>								
26	Home Assistance Program		0	0	0	0	0	0
<b>Pre-2011 programs completed in 2011</b>								
27	Electricity Retrofit Incentive Program	55%	659	4,458,481	361	2,461,078	361	9,844,311
28	High Performance New Construction	50%	12	59,954	6	29,977	6	119,909
29	Toronto Comprehensive	-	0	0	0	0	0	0
30	Multifamily Energy Efficiency Rebates	-	0	0	0	0	0	0

#	Initiative	NTG	Gross Savings		Net Savings		Contribution to Targets	
			Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
31	Data Centre Incentive Program	-	0	0	0	0	0	0
32	ENWIN Green Suites	70%	453	116,102	317	81,272	317	325,086

Table 7: Summarized program results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Residential Program Total	1,611	3,223,745	1,122	2,231,960	768	8,922,122
Commercial & Institutional Program Total	1,270	3,614,021	1,146	3,048,752	607	11,314,122
Industrial Program Total	186	559,614	146	419,461	62	1,663,005

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Home Assistance Program Total	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total	1,123	4,634,538	684	2,572,327	684	10,289,306
<b>Total OPA contracted province-wide CDM programs</b>	<b>4,190</b>	<b>12,031,917</b>	<b>3,099</b>	<b>8,272,500</b>	<b>2,121</b>	<b>32,188,555</b>

## 2.6 Additional Comments

ENWIN has a number of comments on OPA program initiatives based on the lessons it has learned delivering CDM in its service territory in 2011 and earlier. These include:

1. **Providing additional support to the public sector.** ENWIN notes that many public sector facilities and institutions (particularly schools) are in need of major energy efficiency retrofits but are often significantly restricted by the up-front capital costs and project eligibility requirements needed to proceed. ENWIN believes that the OPA should consider introducing specialized public sector initiatives (or special rules within existing initiatives) to help overcome these barriers faced by this sector. Unlike projects in commercial, industrial and residential sectors, retrofits within the public sector go to improving services and infrastructure used and supported by all ratepayers and thus could warrant additional support.
2. **Increasing flexibility of OPA program rules and eligibility criteria.** The OPA program initiatives are province-wide programs that are delivered consistently across the province with fixed program rules and requirements. ENWIN would like to see greater program flexibility related to ERII contracts and energy audit rules. ENWIN considers the 5 to 10 year contracts to be a barrier to the participation of industrial customers in its service territory. ENWIN also considers another barrier to be that participants in the energy audit program must front capital costs for energy audits without any guarantees of actual savings. Greater flexibility in program rules, incentive structure and eligibility requirements related to these two issues could enable ENWIN to better meet the needs of its customer base. This flexibility could be limited by ensuring that CDM programs remain cost-effective and continue to lead to quantifiable and verifiable energy savings.
3. **Adjusting CDM targets.** The establishment of energy and demand targets for each LDC across the province considered customer base, energy usage and other factors that characterized and defined each LDC. Since the establishment of these targets, there has been a noticeable drop in energy demand across ENWIN's service territory due to the closure of several industrial customers. ENWIN recommends having its energy and demand targets reviewed to more accurately reflect its current customer base and the associated opportunity for CDM in its service territory.

In addition to these comments, ENWIN would like to add that it anticipates increasing resources to further boost program delivery and administration efficiencies and better serve the customers of its service territory. Of particular interest is the addition of a resource who can focus on residential program initiatives and ensure that ENWIN reaches this customer segment effectively and efficiently.

### 3 Combined CDM Reporting Elements

#### 3.1 Progress Towards CDM Targets

ENWIN expects that achieving its targets will remain a significant challenge. Table 8 and Table 9 show the gaps that exist between results forecasts in its CDM Strategy and the results that it achieved after the 2011 year. Energy savings realized from participation in 2011 initiatives have greater impact on targets than savings realized from initiatives in 2012 and beyond. Making up for lost participation in 2011 will require a greater than one-to-one increase in participation in 2012-2014. To address this fact, ENWIN is currently re-evaluating its energy savings goals. It is expected that this re-evaluation will contribute to, but not necessarily get all the way to, closing the gap between expected savings and ENWIN's target savings.

**Table 8: Net peak demand savings at the end user level (MW)**

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 - Verified	3.10	2.43	2.43	2.12
2012				
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				<b>2.12</b>
ENWIN 2014 Annual CDM Capacity Target:				<b>26.81</b>
Verified Portion of Peak Demand Savings Target Achieved (%):				<b>7.91%</b>
ENWIN Strategy, Milestone submitted for 2011				22.1%
Variance (MW)	-2.83	-3.5	-3.5	-3.81

**Table 9: Net energy savings at the end-user level (GWh)**

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified	8.27	8.25	8.25	7.42	32.19
2012					
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					<b>32.19</b>
ENWIN 2011-2014 Cumulative CDM Energy Target:					<b>117.89</b>
Verified Portion of Cumulative Energy Target Achieved (%):					<b>27.30%</b>
ENWIN Strategy, Milestone submitted for 2011					50%
Variance (GWh)	-6.35	-6.37	-6.37	-7.20	-26.28

### 3.2 CDM Strategy Modifications

2011 was a “start-up” year for OPA CDM program initiatives across the province. The OPA was not ready for the anticipated January 1, 2011 launch. Additionally, ENWIN needed to finalize schedules, develop processes, and procure services and resources before it could market the OPA CDM program initiatives to its customers. Delays in the launch of OPA CDM programs and challenges with the online program delivery systems also hindered the timely and efficient delivery of CDM programs throughout the province, including the ENWIN service territory. As a result of these delays, ENWIN did not meet its forecasted 2011 results.

ENWIN will continue delivering OPA CDM programs as described in its CDM Strategy. Currently, ENWIN is in the process of reviewing its delivery strategies and identifying any strategy modifications that it may pursue in 2012 and beyond. These modifications will be based on:

- Lessons learned in delivering programs in 2011
- Findings of the third party program evaluations
- Identifying programs that have had greatest impact in its service territory
- Identifying programs that have had the greatest impact across the province
- Understanding which programs respond best to ENWIN marketing efforts

- Understanding which programs are best suited to meet the specific needs of its customer base
- Optimizing PAB expenditures to further increase participation in OPA CDM programs

ENWIN will be reviewing the additional participation that it needs to get back on track to meeting its targets. ENWIN expects that the modifications that it may pursue will help decrease, but not necessarily close the gap between expected savings and target savings.