
ENWIN Utilities Ltd.

Conservation and Demand Management 2012 Annual Report

**Submitted to:
Ontario Energy Board**

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Executive Summary

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

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

In 2012, the first 2 quarters were used to ramp up some of our programs, the remainder of the year saw steady momentum with the following key results:

- Acquired an Embedded Energy Manager (EEM) for one of ENWIN's largest Industrial Customers,
- Received approval and funding for 7 Preliminary PSUI Studies and 7 Detailed Engineering Studies,
- Launched the Home Assistance Program within our service territory with participation levels which exceeded forecast by 70%,
- Achieved 2.2 MW and 13.72 GWh in savings towards ENWIN's targets through the Electricity Retrofit Incentive Initiative (ERII) Program,
- ENWIN communicated with the OPA and filed an application for funding through the Conservation Fund Initiative, however, was unsuccessful in attaining approval for funds to implement a pilot project.

ENWIN has achieved 4.0 MW of net incremental peak demand savings and 16.9 GWh of net incremental energy savings in 2012. A summary of the achievements towards the CDM targets is shown below:

ENWIN Utilities Ltd.	Final 2012 Progress to Targets		
	2012 Incremental	Program to Date Progress to Target (Scenario 1)	% of Target Achieved
Net Annual Peak Demand Savings (MW)	4.0	4.9	18.3%
Net Energy Savings (GWH)	16.9	85.8	72.8%
Scenario 1 = Assumes that demand response resources have a persistence of 1 year.			

The updated forecast included within this report shows that ENWIN expects to achieve the 2011-2014 cumulative energy savings target; however we do not expect to achieve the 2014 peak demand reduction target. Given the expected 11.45 MW shortfall, ENWIN continues to work actively on participant engagement to encourage participation in the OPA programs and ultimately achieve peak demand savings. In addition, ENWIN has been working with the Ontario Power Authority (“OPA”) and the Electrical Distribution Association (“EDA”) to improve program effectiveness; however it is ENWIN’s position that these efforts in itself will not fully overcome the forecasted peak demand savings shortfall. There are existing factors that have and continue to hinder ENWIN’s ability to reach its demand savings target; these factors are discussed throughout this report.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, pursuant to sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (OEB) to establish Conservation and Demand Management (CDM) targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution licence of ENWIN to require ENWIN, as a condition of its licence, to achieve 117.9 GWh of energy savings and 26.8 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 and an addendum on May 20, 2011, which provided a high level description of how ENWIN intended to achieve its CDM targets.

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

ENWIN submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by ENWIN for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs, negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

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

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

1 Conservation Framework

1.1 Current Framework

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

The framework contemplated the inclusion of Board-Approved programs which did not come to fruition and the state of the current suite of Province-Wide OPA programs have limited CDM offerings to customers. This has produced limited savings and has restricted the associated opportunity for LDCs to meet their targets. The process to introduce changes to current program Initiatives or to pilot new initiatives has been challenging, taking considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths. Currently overbuilt governance and excessive legal requirements results in a slow, bureaucratic process, with a burdensome administrative process, as well as, a lack of approvals of LDC proposed CDM Program Applications. There is an inability for LDC's to adapt Program requirements to accommodate program participants who do not fit within the "one size fits all" Program criterion.

The fact that there is no opportunity for revisions to predetermined LDC savings targets where changes in landscape from the previous basis of target determination has occurred has the potential for significant inequity (i.e. decrease in customer base load, Discounted Zone Designation-DR3 Program).

These factors result in a misalignment of control and risk where LDCs have the accountability to achieve their respective CDM targets as a condition of their distribution licence, but the authority for design and funding are controlled substantially by the OPA.

The Ministerial Directive to the Ontario Power Authority provides continuity of the conservation programs and associated compensation for the participants; however the subsequent savings would not be attributed to any LDC target and in effect would be 'lost' due to misalignment of the current CDM framework and LDC Targets. In addition, the establishment of defined administrative funding for 2015 is required to avoid a "stop and start" process, more specifically, to avoid a loss in program delivery momentum, loss in customer engagement in the programs, hesitancy in making long term decisions and loss of acquired expertise.

1.2 Future Framework

ENWIN is supportive of government's renewed commitment for conservation and demand management in Ontario. LDCs are committed to working with the government and other stakeholders to develop the next framework for CDM in the Province.

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

The future framework should also address the following key factors:

- The balance between locally-run, regional CDM programs and OPA-run Provincial programs.
- Increased Program flexibility.
- A more effective Change Management Process.
- A built-in process to address changes in LDC customer base load and OPA CDM Program availability (i.e. DR3 –Discounted Zone) that impact the ability to reach set electricity savings targets.
- The replacement of the Measurement and Verification Process with Gross Savings for determining achievement towards energy saving targets.

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

2 Board-Approved CDM Programs

2.1 Introduction

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

At this time, the implementation of Time-of-Use (“TOU”) Pricing has been deemed as a Board-Approved Conservation and Demand Management (“CDM”) program that will be offered in April 2014 in Windsor, Ontario.

2.2 TOU Pricing

2.2.1 TOU PROGRAM DESCRIPTION

Initiative Activities/Progress:

ENWIN is expected to transition its RPP customers to TOU billing in April 2014.

2.3 ENWIN Utilities Ltd.’s Application with the OEB

ENWIN did not file any CDM applications with the OEB in 2012. There were no LDC programs approved by the OEB in 2012.

3 OPA-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective February 21, 2011, ENWIN Utilities Ltd. entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. Program details are included in Appendix A. In addition, results include projects started pre-2011 which were completed in 2011:

Initiative	Schedule	Date schedule posted	Customer Class	LDC In-Market Date
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	All residential rate classes	Jan. 1, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes	Jan. 1, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes	Jan. 1, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes	Jan. 1, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes	Jan. 1, 2011
Retailer Co-op	n/a	n/a	All residential rate classes	Jan. 1, 2011
Residential Demand Response	Schedule B-3	Aug 22, 2011	All residential rate classes	Mar. 2013
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes	Mar. 1, 2011
Commercial & Institutional Program				
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes	Feb. 1, 2011
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW	May 1, 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes	Mar.1, 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes	Jan. 23, 2012
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes	Jun. 1, 2011
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes	Mar. 1, 2011

Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above	Jan. 1, 2011
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Industrial Program				LDC In-Market Date
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above	Nov. 1, 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above	Nov. 1, 2011
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above	Dec. 3, 2012
Key Account Manager ("KAM")	Schedule D-4	May 31, 2011	General Service 50 kW & above	Nov. 1, 2011
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	Feb. 1, 2011
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	Jan. 1, 2011
Home Assistance Program				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	Feb. 1, 2012

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

Pre-2011 Programs			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes
EnWin Green Suites	n/a	n/a	All general service classes
Residential Demand Response –Peaksaver Extension	n/a	n/a	All residential rate classes and GS<50 KW

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

Initiative Not in Market in 2012	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes.	Never launched and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Never launched and removed from Schedule in Q2, 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.	Launched in 2013 by OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Never launched and removed from Schedule in Q2, 2013.
Commercial & Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011/2012. As per the OPA there no plans to launch this Initiative in 2013.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

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

3.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available and additional initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

3.2.1 RESIDENTIAL PROGRAMS

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

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

Discussion:

The inclusion of LED technology into the Bi-annual Retailers events in 2012 and the annual coupons in 2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement. The revamped PeaksaverPLUS program is the main Residential Initiative which drives savings for LDCs and has been well received by consumers eager to utilize an In Home Display to help manage their energy consumption.

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

Work to revitalize and increase the effectiveness and breadth of the Initiatives offered through the Residential Program needs to be high priority. There are opportunities within the Residential marketplace that need to be identified, developed and offered to customers. A revised home audit and other Initiatives which could engage an average residential customer could be considered. 100% attributable coupons for LDCs may present an opportunity for improved electrical savings.

3.2.1.1 *Appliance Retirement Initiative (Exhibit D)*

Initiative Activities/Progress: As this program is largely administered by the OPA, LDC activities are limited to complementing the OPA's province-wide marketing and advertising efforts. ENWIN has marketed this initiative through our website, an advertisement in a calendar distributed city-wide and the distribution of program materials at local Home Shows.

Additional Comments:

- Due to the duration of the program and ENWIN's earlier success with this initiative, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to have reached market saturation and has been under consideration for removal from the Portfolio.
- Rather than strictly remove this Initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be strengthened through program evolution rather than weakened through diminished program offerings.
- Results demonstrate that consumers have been very responsive to province-wide advertising therefore, OPA provincial marketing should continue to play a key role.

3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress: This initiative is mainly administered by retailers. The take-up of this initiative within ENWIN's service territory has been minimal. ENWIN has not participated in retailer events in 2012.

Additional Comments:

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative. The Fall events have not had retailer participation, therefore the full savings budgeted by ENWIN have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room Air Conditioners has dropped resulting in the retail participant not accepting window air conditioners during the Spring 2013 event.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications between the OPA, retailers and LDC's will aid in appropriate resource allocation and marketing of the Initiative.

3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress: Up-take within this initiative has decreased significantly from 2011. ENWIN has marketed this initiative through our website, distribution of program materials at local Home Show, radio ads and presentations made at local industry meetings attended by area contractors.

Additional Comments:

- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to end of useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help with this.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and Central Air Conditioning sales to eligible units.
- Channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. Due to an OPA contracting delay, no applications were processed from approximately the end of October 2012 to February 2013.
- LDC HVAC reports have been delayed and are not as complete and accurate as are required by LDCs to make adjustments to their marketing strategies.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress: Take-up within this initiative has drastically decreased from 2011. ENWIN promoted this initiative through our website, radio ads and by distributing coupons at a local Home Show.

Additional Comments:

- This Initiative was ineffective for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. As such, savings budgeted by LDCs did not materialize.
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behavior. This also resulted in the delayed launch of the Initiative in 2012.
- Coupon booklets were not printed and mailed out in 2012. As such, Coupons were not available to consumers without the ability to download and print them and thus, not widely circulated.

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

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

Initiative Activities/Progress: Take-up within this initiative has increased from last year; however the associated demand savings realized are minimal (23 KW). ENWIN did not take part in retailer events in 2012.

Additional Comments:

- This Initiative is strongly influenced by the retail participants.
- The Product list has changed very little over the past four years.
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for Initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- Communications regarding retailer participation continues to be delayed. Improved and timelier communications will aid in appropriate resource allocation and marketing of the Initiative.

3.2.1.6 *Retailer Co-op*

Initiative Activities/Progress: ENWIN has not taken part in retailer events for this initiative in 2012.

Additional Comments:

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

3.2.1.7 *New Construction Program (Schedule B-2)*

Initiative Activities/Progress: ENWIN provides program availability on our website. Interest in this initiative is very low. New construction projects within ENWIN's service territory were diminished throughout 2012 due to the existing economic climate.

Additional Comments:

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the home builders/contractors regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- Following limited participation in 2011, the application process was revisited in 2012 to streamline administration in response to builder feedback. Participation levels are expected to grow but there will be a lag to when results materialize as homes pre-approved could take a year or more to be completed.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association ("EDA") Working Groups, changes are being processed through change management for 2012. However, the lengthy change management process has resulted in continued non-participation from builders.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress: ENWIN commenced the RFP process to procure a 3rd party service provider to administer the new PeaksaverPLUS program in the latter part of 2012. ENWIN went to market with PeaksaverPLUS in 2013.

Additional Comments:

- The schedule for PeaksaverPLUS was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. The product procurement process uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, LDCs could not be in market with the Peaksaver Plus program until 2012, or later which has resulted in delayed savings.
- Smart Meters installed by most LDCs do not have the capability to communicate directly to an In Home Display. When proposing technical Initiatives that rely on existing LDC hardware or technology there should be an extensive consultative process.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the Smart Meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an In Home Display (IHD).
- This is the main Initiative within the Residential portfolio that drives demand savings for LDCs.
- Given the different LDCs smart meter environments, and needs, each LDC is positioning the Initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.
- There currently is not an avenue for interested participants without the ability to provide demand response capabilities to nonetheless obtain an IHD and gain energy saving benefits.

3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

Description: Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs to help fund energy audits, to replace

energy-wasting equipment or to pursue new construction that exceed our existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

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

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

Discussion:

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

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

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to iron out many of the issues which could be rectified. In particular, a key accomplishment in 2012 was the advent of the expedited change management as a means to accelerate certain program changes the effects of which will be seen in 2013.

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

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

Initiative Activities/Progress: In 2012, ENWIN continued to engage the Commercial and Institutional customer base to promote awareness and participation in the Equipment Replacement Incentive Initiative (ERII). As a result in 2012, ERII contributed more than 2.2 MW in peak demand savings and 13.72 GWh in energy savings towards ENWIN's savings targets. ENWIN continues to see increased participation in the initiative; however, lighting driven projects still represent more than 95% of the total applications received. It has been noted that the program initiatives' current framework is not very conducive to mechanical upgrades due to the required lead time to file, review and pre-approve applications.

Additional Comments:

- It appears that the marketplace has an awareness of the Program; however do not clearly understand how the programs work and how to access program incentive funds. A large proportion of ENWIN's savings are attributed to ERII.
- The Program could benefit from centralized campaigning to Regional Equipment Manufacturers to increase Program awareness and benefits.
- The centralized process review used for 2012 project payment has been streamlined by the OPA and payments for projects were greatly improved – faster and more consistent compared to 2011.
- Capability building programs from within the Industrial program suite have had very positive contributions to the ERII program due to the negative perception associated with the requirements of the PSUI Industrial Program Contracts.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facilities to complete capital upgrades.
- A number of customer facing issues in CRM (the OPA centralized application system) have been resolved.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as customer Application Representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of Channel Partners is essential to program success.
- There continues to be poor uptake in program participation from HVAC (Unitary AC) and compressed air channel partners.
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.
- Expanding the capacity of the engineered applications can offer customers an opportunity to maximize savings and incentives. Recognizing this, LDC proposed compressed air engineered worksheets were provided to the OPA for inclusion in the Initiative in Q3, 2012. To date, these have not been accepted and provided to LDCs for use.
- An identified deficiency in the various renditions of the ERII Initiative is the “hard stop” of the program as of a specific date. Without a streamlined transition into a new program, many customers

become frustrated and refuse to participate. LDCs struggle to repair customer and channel partner relationships and gain momentum in the market place once again.

- While the Ministerial Directive provides continuity of the conservation programs for the participant, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. The establishment of defined administrative funding for 2015 is required to avoid a “stop and start” process and the associated outcomes (i.e. loss of delivery momentum, customer engagement and acquired LDC expertise).

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

Initiative Activities/Progress: Activity in the Direct Install Initiative was limited in 2012, with the completion of only 79 retrofits. Decreased participation in this initiative is likely the result of market saturation due to the successful execution of the previous Power Savings Blitz initiative. ENWIN continues to market the program to its GS < 50 kW customers via direct mail, outbound calling and site visits in hopes of increasing participation levels.

Additional Comments:

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

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

Initiative Activities/Progress: To date, ENWIN has yet to see any participation in this initiative. This initiative has a very narrow scope and as such, is only available to a limited number of customers.

Additional Comments:

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

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

Initiative Activities/Progress: Given that this initiative requires considerable customer support and a specific skill set, ENWIN chose to contract a third party service provider to deliver this initiative. This contract was established in early 2012. To date, ENWIN has seen modest uptake in this initiative. The low participation level can be attributed to the fact that participants are required to submit an application prior to the issuance of a building permit. Furthermore, the amount of time and effort required to complete a custom application and the existing economic climate in the Windsor/Essex region has resulted in reduced new building developments.

ENWIN has submitted a number of “Requests for Waiver” Forms to the OPA in an attempt to capture any new building developments occurring within ENWIN’s service territory. Currently there appears to be a large backlog of requests with the OPA, as it can take 4 to 6 months for the OPA to provide LDC’s with a decision on project eligibility.

Additional Comments

- There is typically a long sales cycle for these projects, and then a long project development cycle. As the program did not launch until mid-2011 and had limited participation, no results appeared in 2011

or 2012. The majority of the results are expected in 2013-2014, with a reduced benefit to cumulative energy savings targets.

- Within the Ministerial Directive, facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing efficient measures.
- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer than estimated. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. As there has been no defined administrative funding beyond 2014, many LDCs are unsure how these project applications will be finalized.
- The effort on behalf of the Applicant Representative to participate through the custom stream exceeds the value of the incentive for many customers.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress: ENWIN has seen modest uptake in this initiative to date, with only 5 audits being completed in 2012. ENWIN continues to market this initiative to all of its Commercial and Institutional customers, as well as, to channel partners to promote participation. Of the audits completed in 2012, none have resulted in spill-over projects (retrofits). This initiative may benefit from a review to further incent participants to undertake energy saving projects identified within the completed audits. In 2013, ENWIN plans on contacting all previous participants for the purposes of promoting the ERII initiative and to gain an understanding of participants' hesitancy in moving forward with retrofits identified within their respective audits.

Additional Comments:

- Customer uptake was limited in 2011, with a slight improvement throughout 2012. The low take-up rate in this initiative may be due to customers' hesitancy in undertaking a costly audit rather than apply those funds directly towards capital projects.
- The energy audit Initiative is considered an 'enabling' Initiative and 'feeds into' other saveONenergy Initiatives. There are no savings attributed to LDC targets from the audit itself, however, ENWIN is also not seeing any projects and associated identified savings deriving from the completed audits.

- Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participants are limited to one energy audit.
- For large facilities, the customer commitment (capital contribution) is significant.

3.2.3 INDUSTRIAL PROGRAM

Description: Large facilities are discovering the benefits of energy efficiency through the Industrial Programs which are designed to help identify and promote energy saving opportunities. It includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

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

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

Discussion:

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

The OPA has removed the Meter Lending Library from the Process and Systems Upgrades Initiative and no alternate program offering or other options have been presented to the LDC's and participants to aid in the ability to accurately monitor projects on a temporary basis for the purposes of project identification, and/or post project Measurement and Verification (M & V). Despite the fact that M & V costs can be submitted as part of the expenses related to a post project submission (via the Retrofit Program), often the capital costs associated with the required equipment cannot be justified for use in a single project.

Aside from the Demand Response Program, the Industrial Programs are primarily energy based despite the fact that KAM's, EEM's and REM's targets are tied to significant demand related reductions. Attention

should be given to identifying and developing of additional Programs that target demand related conservation measures.

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

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefitted the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with natural gas load displacement generation projects may also increase uptake although results may not be counted towards LDC targets due to in-service dates beyond 2014. Furthermore, during the Provincial moratorium on Natural Gas Load Displacement projects, several projects sat idle awaiting direction from the Ministry and the OPA. Once the Ministry reversed its moratorium, projects were required to be submitted for individual review and approval from the OPA. The start/stop of the decision making process has caused uncertainty with potential Program participants regarding the likelihood that these projects could proceed without further roadblocks in the process. Additionally, the analysis, design, and implementation of these projects require a very long time frame to complete, potentially jeopardizing the participants' ability to complete the project prior to December 31, 2015. LDC's will invest significant time and resources on these projects without certainty that the demand related savings associated with these projects will count towards our provincial target.

Looking ahead, there is minimal opportunity to make additional valuable changes to the current program suite and it is unlikely that any changes will be reflected in LDC 2014 results.

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

Initiative Activities/Progress: During calendar year 2012, ENWIN engaged all electrical Key Accounts and large energy users. As a result, 7 (seven) Preliminary Engineering Studies and 7 (seven) Detailed Engineering Study applications were submitted and approved for funding.

Of the 7 PES applications, one generation related study was completed, however it could not proceed any further (to a Detailed Engineering Study or Project Capital Incentive) due to a sudden moratorium on Natural Gas Fired Customer Based Generation projects; and another project was ultimately deemed to be "not feasible" due to factors existing within the customers operating environment. The 7 DES applications resulted in one Generation related project sitting idle for in excess of one year, awaiting approval to proceed from the OPA and another project was not pursued by the program participant once they were made aware of the contract required with accessing the program funding.

Additional Comments:

- Approximately 100 engineering study applications have been submitted. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades. Further, several organizations were hesitant to undertake studies and or projects due to the contractual rigor associated with these programs.
- There is typically a long sales cycle for these projects, and then a long project development cycle. As such, limited results are expected to be generated in 2012. The majority of the results are expected in Quarter 3 & 4 of 2014 or early 2015, with a much reduced benefit to cumulative energy savings targets. As at the filing date of this report, there have been no PSUI incentives completed to date province-wide.
- Delays with processing funding payments have caused delayed payments to Participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and Participant acknowledging that the Participant cannot be paid until the funds are received.
- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is the development of new agreement for both small and large projects which is simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream. Most industrial projects to-date have been submitted as ERII projects due to the less onerous contract and M&V requirements, although potential incentives are reduced using the ERII program.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to \$1,000,000 in incentives. This was intended to allow more projects to be eligible for the new small capital project agreement and increase participant uptake. The small capital project agreement was finalized through change management in August 2013.
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.

3.2.3.2 *Monitoring & Targeting Initiative (Schedule D-2)*

Initiative Activities/Progress: ENWIN submitted and received approval for one (1) Monitoring & Targeting application in December 2012. Attempts to increase participation in this Program have been challenging. This is due primarily to the limitation in utilizing any funding to aid in the design and scoping of the Monitoring & Targeting System. It was proposed at the Electricity Distributors Association Industrial Working Group, to allow a \$10,000 Preliminary Engineering Study to aid in the “scoping” of the M & T equipment, software, meters, etc. and reduce the \$75,000 incentive by this amount of funding required for the scoping phase. This proposal never materialized and increasing program uptake is still challenging. Additionally, competition exists in the market for funding M&T opportunities through other available sources. This also creates an issue due to the inability for program participants to “stack” funding incentives from various available sources.

Additional Comments:

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This data review and associated ability to act on the data findings, requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.
- Customer facilities with an Energy Manager in place are also hesitant to take part in the M&T initiative due to the commitment to save 200 KW in addition to the 300 KW requirement associated with the Energy Manager initiative.
- Through the change management process in 2013, changes are being made to ERII to allow smaller facilities to employ M&T systems.

3.2.3.3 *Energy Manager Initiative (Schedule D-3)*

Initiative Activities/Progress: Throughout calendar year 2012, four (4) applications were submitted to the OPA for Embedded Energy Managers. One of these EEM positions has not materialized. Another EEM awaited a long waiver process undertaken by the OPA, due to the customers’ desire to participate under the initiative however, required modifications to address internal restrictions. Another EEM was hired and “in place” during the month of December 2012. The 4th application was not completed until 2013 due to a lengthy internal process.

Additional Comments:

- The Energy Managers have proven to be a popular and useful resource for larger customers. There are approximately 70 Embedded Energy Managers (EEMs) and 25 Roving Energy Managers (REMs) being utilized by customers across the province.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication and delays in approval from the OPA resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and Customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to 7 months to have a resource in place.
- New energy managers require training, time to familiarize with facilities and staff and time to establish “credibility”. Energy Managers started filling their pipeline with projects but few projects were implemented in 2012.
- There have been a number of studies identified by Energy Managers and they have been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities albeit not all through PSUI available programs but through the ERII program.
- Requirement that 30% of target must come from Non-incented projects is identified as an issue for most REMs, although final targets are not due until 2013. The Industrial working group has proposed to remove this requirement for REM’s only as they are not resident full time at a customer facility to find the non-incented savings. It should be noted that the 30% threshold is an issue for EEM’s as well.
- A decision on extending funding for EM’s is required in 2013 for this important Initiative, which should continue beyond 2014, failing this, these expert resources trained by LDC’s using OPA funds, will be lost in favour of full-time employment elsewhere.

3.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress: ENWIN’s Key Account Manager (KAM) has actively engaged all ENWIN’s large electricity users and has worked to promote the saveONenergy For Business incentive programs throughout the entire customer base. During calendar year 2012, 9 Preliminary Engineering Studies (2 of which did not proceed), 7 Detailed Engineering Studies, 4 Embedded Energy Managers and 1 Monitoring & Targeting project were identified and submitted for funding approval.

Due to some OPA program contractual related issues and the time frame required to identify and cultivate projects, no savings are attributable to the KAM other than projects that were delivered through the Retrofit Program.

Additional Comments

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- A decision on extending funding for KAM's is required in 2013 for this important Initiative, which should continue beyond 2014, failing this, these expert resources trained by LDC's using OPA funds, will be lost in favour of full-time employment elsewhere.

3.2.3.5 Demand Response 3 (D-6)

Initiative Activities/Progress: Uptake in the Demand Response 3 (DR3) initiative has been somewhat stagnant. Several issues relating to the delivery of the program have affected uptake within our service territory, these include but are not limited to:

- The Windsor area being designated as a "Discounted Zone". This has created an environment whereby the incentives paid to participants, is not sufficiently attractive when weighed against the required effort in delivering electricity demand reductions. If Windsor's DR3 rates were equivalent to rates experienced in Non-discounted Zones elsewhere in the province, it is likely that more participation in the DR3 program would be experienced and valuable demand savings would be achievable towards our provincial target. The fact is, "Discounted Zones" do not see the same program uptake as "Standard Zones", although provincial targets were set based upon an assumption that uptake in regions would be similar which is now not the case with the rated structure which handicaps those in "Discounted Zones".
- Through 2012, due to OPA contractual requirements with provincial aggregators, aggregators were not required to disclose information to LDC's regarding customers' DR3 involvement, committed load reductions, etc. Under the DR3 initiative, there is no requirement for aggregators to "work with" LDC's for the identification, development, and implementation of DR3 savings. It is the role of the LDC to develop relationships with customers within our service territory and to promote saveONenergy For Business incentives and uptake, yet aggregators are not held to the same standard of engagement with LDC's and DR3 program participants.
- In 2012, it was difficult to reconcile DR3 related savings within ENWIN's service territory due to the inability to obtain signed contractual information regarding uptake for DR3 load reductions. There is the probability that participants were engaged in the DR3 program, yet LDC's have no ability to verify that the savings attributed to these contracts were captured in the OPA's annual target savings reports.

Additional Comments:

- No program improvements were made in 2012 however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue to program participants and subsequently has resulted in decreased program participation.

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

Initiative Activities/Progress: Due to the administration and coordination efforts associated with the successful delivery of the Home Assistance Program, ENWIN opted to contract a third party service provider to provide a “turn-key” delivery service for this initiative. Initially, the program eligibility requirements were very restrictive in nature which limited the potential market. However, through the OPA’s Change Management Process, the EDA’s Residential Working Group and the OPA have been able to address the majority of the issues that were hindering the delivery of HAP. These issues included, but are not limited to, the eligibility of Social Housing Providers, updated FAST tool and the measures price list.

ENWIN aggressively marketed the Home Assistance Program in 2012. Marketing efforts culminated with a two-page story in the local newspaper which provided an overview of the HAP program along with testimonials. As a result of the article, ENWIN received over 550 incoming calls within a three week period. At the end of 2012, ENWIN had approximately 900 participants in the program which was 70% higher than was initially forecasted.

Additional Comments:

- Awareness of the program amongst social agencies took time to develop. Benefits started to become evident in late 2012.
- Centralized payment processes were not developed in 2011. The interim payment process was established in 2012.
- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and is showing benefits in 2013.

- The financial scope, complexity, and customer privacy requirements of this Initiative are challenging for LDCs and most have contracted this program out.

3.2.5 PRE-2011 PROGRAMS

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

4 2012 LDC CDM Results

4.1 Participation and Savings

Table 1:

See next page.

Table 1: ENWIN Utilities Ltd. Initiative and Program Level Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program															
Appliance Retirement	Appliances	400	137			22	8			165,482	55,074			30	827,049
Appliance Exchange	Appliances	97	84			10	12			11,796	21,788			16	106,934
HVAC Incentives	Equipment	2,380	1,369			698	289			1,305,397	479,899			987	6,661,287
Conservation Instant Coupon Booklet	Items	7,800	480			18	4			292,537	21,731			22	1,235,340
Bi-Annual Retailer Event	Items	13,527	16,489			26	23			456,748	416,248			49	3,075,734
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	621	0			348	0			0	0			0	0
Residential Demand Response (IHD)	Devices	0	0			0				0					
Residential New Construction	Homes	0	0			0	0			0	0			0	0
Consumer Program Total						1,122	335			2,231,960	994,741			1,103	11,906,344
Business Program															
Retrofit	Projects	39	89			250	2,206			1,326,534	13,716,462			2,436	46,295,003
Direct Install Lighting	Projects	508	79			662	61			1,713,038	234,272			417	6,699,865
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	0	0			0	0			0	0			0	0
Energy Audit	Audits	0	5			0	26			0	125,881			26	377,644
Small Commercial Demand Response	Devices	33	0			21	0			0	0			0	0
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3	Facilities	3	3			235	236			9,180	3,428			0	12,608
Business Program Total						1,168	2,529			3,048,752	14,080,044			2,879	53,385,120
Industrial Program															
Process & System Upgrades	Projects	0	0			0	0			0	0			0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	1			0	77			0	667,663			77	2,002,988
Retrofit	Projects	8				62				414,515				62	1,658,058
Demand Response 3	Facilities	1	4			84	1,004			4,947	24,195			0	29,142
Industrial Program Total						146	1,081			419,461	691,858			139	3,690,188
Home Assistance Program															
Home Assistance Program	Homes	0	829			0	99			0	989,326			99	2,967,979
Home Assistance Program Total						0	99			0	989,326			99	2,967,979
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	39	0			361	0			2,461,078	0			361	9,844,311
High Performance New Construction	Projects	1	1			6	30			29,977	148,198			36	564,504
Toronto Comprehensive	Projects	0	0			0	0			0	0			0	0
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0			0	0
LDC Custom Programs	Projects	3	0			317	0			834,132	0			317	3,336,527
Pre-2011 Programs completed in 2011 Total						684	30			3,325,187	148,198			714	13,745,342
Other															
Program Enabled Savings	Projects	0	0			0	0			0	0			0	0
Time-of-Use Savings	Homes														
Other Total							0				0			0	0
Adjustments to Previous Year's Verified Results															
Energy Efficiency Total						2,432	2,834			9,011,233	16,876,544			4,935	85,653,223
Demand Response Total (Scenario 1)						688	1,240			14,127	27,623			0	41,750
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						3,121	4,040			9,025,360	16,940,525			4,895	85,823,172
Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1, 2011.												Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.			
												Full OEB Target:			
												% of Full OEB Target Achieved to Date (Scenario 1):			
												26,810			
												117,890,000			
												18.3%			
												72.8%			

Table 2: Summarized Program Results

Program	Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	1.10	11.91	4.11%	10.10%
Business Program Total	2.88	53.39	10.74%	45.28%
Industrial Program Total	.14	3.69	.52%	3.13%
Home Assistance Program Total	.10	2.97	.37%	2.52%
Pre-2011 Programs completed in 2011 Total	.67*	13.87*	2.51%*	11.77%*
Total OPA Contracted Province-Wide CDM Programs	4.89	85.83	18.3%	72.8%

*Includes OPA adjustments to previous Year's Verified Results

4.2 Evaluation

Final 2012 EM&V Findings

The following document provides a summary of the 2012 EM &V findings for all of the evaluated saveONenergy initiatives.

Consumer Program

Bi-Annual Coupons

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

Annual Coupons

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

HVAC

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

Appliance Retirement

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

Appliance Exchange

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

peaksaverPLUS

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

Residential New Construction

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

Business Programs

Retrofit

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

Small Business Lighting

- Reported hours of usage continue to be inaccurate - only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are resulting in participation from building types that may not fully operate during the summer peak period.
 - This trend contributes to lower realization rates for demand savings in 2012.

- Due to changing regulations in lighting measures, the assumed baseline technology will eventually be phased out. This regulation impacts the persistence of savings over the lifetime of lighting measures.

Existing Building Commissioning (EBC)

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

New Construction

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

Audit Funding Program

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

Industrial Programs

Process and Systems Upgrade Initiative

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

DR-3

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

Home Assistance Program

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

4.3 Spending

Table 3: 2012 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	42,234				42,234
Appliance Exchange	26,834				26,834
HVAC Incentives	40,212				40,212
Conservation Instant Coupon Booklet	36,052				36,053
Bi-Annual Retailer Event	47,049				47,050
Retailer Co-op					
Residential Demand Response	73,681				73,681
New Construction Program					
Business Program					
Efficiency: Equipment Replacement	231,020		1,406,748		1,637,768
Direct Installed Lighting	74,938	23,925	78,241		177,104
Existing Building Commissioning Incentive					
New Construction and Major	81,243				81,243

Renovation Initiative					
Energy Audit	84,802		25,117		109,919
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	7,643				7,643
b) detailed engineering study	7,819				7,819
c) program incentive					
Monitoring & Targeting	6,757				6,757
Energy Manager	7,995				7,995
Key Account Manager ("KAM")	116,256			116,256	232,512
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3	7,552				7,552
Home Assistance Program					
Home Assistance Program	122,013	450*	132,632		255,095

Pre 2011 Programs					
Electricity Retrofit Incentive Program					
High Performance New Construction					
EnWin Green Suites					
Residential Demand Response- Peaksaver Extension Period					
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)					
Home Energy Audit Tool					
TOTAL Province-wide CDM PROGRAMS	1,014,100	24,375	1,642,738	116,256	2,797,469

Table 4: Cumulative Spending (2011-2014)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	91,672				91,672
Appliance Exchange	76,272				76,272
HVAC Incentives	89,650				89,650
Conservation Instant Coupon Booklet	85,491				85,491
Bi-Annual Retailer Event	96,488				96,488
Retailer Co-op					
Residential Demand Response	73,681				73,681
New Construction Program					
Business Program					
Efficiency: Equipment Replacement	367,026		1,508,033		1,875,059
Direct Installed Lighting	199,708	174,075	570,939		944,722
Existing Building Commissioning Incentive					
New Construction and Major Renovation Initiative	81,243				81,243

Energy Audit	84,802		32,832		117,634
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)	120,686				120,686
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	15,773				15,773
b) detailed engineering study	15,949				15,949
c) program incentive	8,129				8,129
Monitoring & Targeting	14,886				14,886
Energy Manager	16,124				16,124
Key Account Manager ("KAM")	144,021			144,021	288,042
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)			49,641		49,641
Demand Response 3	15,681				15,681
Home Assistance Program					
Home Assistance Program	146,796	450*	132,632		279,878
Pre 2011 Programs					

Electricity Retrofit Incentive Program			902,954		902,954
High Performance New Construction					
EnWin Green Suites			12,189		12,189
Residential Demand Response – Peaksaver Extension Period		318,146	17,200		335,346
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)					
Home Energy Audit Tool					
TOTAL Province-wide CDM PROGRAMS	1,744,078	492,671	3,226,420	144,021	5,607,190

*HAP Program OPA Outreach Fund.

4.4 Additional Comments

ENWIN expects to achieve the 2011-2014 cumulative energy savings target, however does not expect to achieve the 2014 peak demand reduction target. Given the expected shortfall discussed further in Section 5.3 of this report, ENWIN continues to work actively on participant engagement to encourage participation in the OPA programs and ultimately achieve peak demand savings. In addition, ENWIN has been working with the Ontario Power Authority (“OPA”) and the Electrical Distribution Association (“EDA”) to improve program effectiveness; however it is ENWIN’s position that these efforts in itself will not fully overcome the forecasted peak demand savings shortfall. There are existing factors that have and continue to hinder ENWIN’s ability to reach its demand savings target, these are summarized below:

- The established target level is too high; it requires adjustment to reflect the current reality within ENWIN’s service territory (experienced a 9.89% total load reduction from the load level used as the basis of demand target determination).
- OPA’s designation of ENWIN’s service territory as a discounted zone for purposes of the DR3 program, negatively impacting the uptake for this demand savings program.
- Insignificant/lack of demand saving programs to replace the loss of budgeted DR3 demand savings.
- Late start in full suite of programs coming into market.
- Lack of long term continuity/commitment to conservation funding.
- Need for a more effective and streamlined change management process.

5 Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

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

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by OPA	3.1	2.4	2.4	2.1
2012 – Verified by OPA		4.0	2.8	2.8
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				4.9
ENWIN Utilities Ltd. 2014 Annual CDM Capacity Target:				26.8
Verified Portion of Peak Demand Savings Target Achieved (%):				18.3%

Table 6: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	9.0	9.0	9.0	8.2	35.2
2012 – Verified by OPA		16.9	16.8	16.8	50.6
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					85.8
ENWIN Utilities Ltd. 2011-2014 Cumulative CDM Energy Target:					117.9
Verified Portion of Cumulative Energy Target Achieved (%):					72.8%

5.2 Variance from Strategy

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified	3.1	2.4	2.4	2.1
2012 – Verified		4.0	2.8	2.8
Verified Net Annual Peak Demand Savings in 2014:				4.9
ENWIN Strategy, Milestone submitted for 2012 (less DR attributed to Peaksaver):				11.07*
Variance (MW)				-6.17

* The Peak Demand Target was established at 27 MW at the time of filing ENWIN's CDM Strategy with the OEB, the demand target was subsequently amended to 26.81 MW.

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	
2011 – Verified	9.0	9.0	9.0	8.2	35.2
2012 – Verified		16.9	16.8	16.8	50.6
Verified Net Cumulative Savings 2011 -2014:					85.8
ENWIN Strategy, Milestone submitted for 2012 (less DR attributed to Peaksaver)					39.81**
Variance (GWh)					45.99

** The Energy Target was established at 124 GWh at the time of filing ENWIN's CDM Strategy with the OEB, the Energy Target was subsequently amended to 117.9 GWh.

5.3 Outlook to 2014 and Strategy Modifications

CDM Strategy

	2011 - Actual			2012 - Actual			2013 - Forecast			2014 – Forecast		
	No. of Participants	MW	MWh	No. of Participants	MW	MWh	No. of Participants	MW	MWh	No. of Participants	MW	MWh
Consumer Program	24,825	1.12	2.23	18,559	.34	.99	14,239	1.82	1.33	14,239	1.82	1.33
Business Program	583	1.17	3.05	176	2.53	14.08	220	2.63	12.70	226	2.72	12.84
Industrial Program	9	.15	.42	5	1.08	.69	24	1.55	9.00	23	1.35	9.00
Low Income Program	0	0	0	829	.10	.99	1086	.13	1.30	1084	.13	1.30
Pre-2011 Programs completed in 2011	43	.68	3.33	1	.03	.15	0	0	0	0	0	0
Adj.					-.03	.04						
Total		3.12	9.03		4.04	16.94		6.13	24.33		6.02	24.47
Total 2011-2014											15.36	159.93
Target											26.81	117.89
“+/-”											-11.45	42.04
% of Target											57.29	135.66

While ENWIN is tracking in line to meet its' Energy Savings Target level, ENWIN is concerned with reaching the Demand related Savings Target. The above forecast reveals a shortfall of 11.45 MW in ENWIN's Demand Savings toward target. ENWIN's original CDM Strategy had forecasted a total of 8 MW originating from the DR3 program. As at December 31, 2014, the revised demand savings forecast attributable to the DR3 program is .782 MW based on ENWIN's service territory being designated a

“Discounted Zone” for purposes of this program. It does not appear that the forecasted savings included in our original CDM Strategy for this program, will come to fruition.

To address the expected deficiency in reaching the Demand Savings Target, ENWIN is focusing efforts on CDM initiatives that encourage demand savings. In 2013, ENWIN launched the PeaksaverPLUS program and also extended a 3rd party Service Contract to continue to administer the very successful Home Assistance Program within ENWIN’s service territory. ENWIN is also in the process of developing and launching an ERII Applicant Representative Program to incent channel partners to drive additional take-up in the Equipment Replacement Incentive Initiative (ERII) as a means to achieving further demand savings towards targets.

ENWIN is also providing Conservation education through an Educational Conservation and Safety School Program. This education will be provided to all elementary school students within ENWIN’s territory as a means of instilling the importance and awareness of conservation at an early age.

On an innovative front, ENWIN is considering a pilot project within the OPA’s Conservation Fund initiative relating to incorporating Water Conservation Measures within the already successful Home Assistance Program offering. These water savings will equate to savings in upstream water production and subsequently electrical savings.

6.0 Conclusion

Over the course of 2012, ENWIN has achieved 4.04 MW in peak demand savings and 16.941 GWh in energy savings. Throughout 2011 and 2012, we have achieved savings representing 18.3% and 72.8% of ENWIN's 2014 target, respectively. These results are representative of a considerable effort expended by ENWIN, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

However, despite continuing improvements to existing programs, ENWIN faces challenges in the remaining years of the current CDM framework. With the current slate of available OPA Programs, the current and forecasted continuing economic local climate and the current forecast of implementation and projected savings, ENWIN expects to meet its energy consumption target but will struggle to meet its demand savings target. ENWIN expects an 11.45 MW shortfall to its target in demand savings by the end of 2014.

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

Appendix A: Initiative Descriptions

Residential Program

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

- Schedule B-1, Exhibit D and
- SaveONenergy website <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

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

HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

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

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

Delivery: The OPA develops the electronic version of the coupons and posts them online for download. Three LDC specific coupons were made available for local marketing and utilization by LDCs. The OPA enters into agreements with retailers to honour the coupons.

Additional detail is available:

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

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

Additional detail is available:

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

In Market Date: March 2011

RETAILER CO-OP

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

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

Additional detail is available:

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

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

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

C&I Program

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

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

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

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

Initiative Frequency: Year round

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

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

Target End Uses: Lighting and electric water heating measures

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

Additional detail is available:

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

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

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

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

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

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-1 and

- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

Industrial Program

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

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

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

MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

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

ENERGY MANAGER INITIATIVE (Schedule D-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

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

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

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

Delivery: LDC delivered

Additional detail is available:

ScheduleD-4

DEMAND RESPONSE 3 (Schedule D-6)

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

Initiative Frequency: Year round

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

Description: Demand Response 3 (“DR3”) is a demand response Initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their

use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

Targeted End Uses: Commercial and Industrial Operations

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

Additional detail is available:

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

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

LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (SCHEDULE E)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

- Schedule E

Initiative Activities/Progress:

BPI took the lead on a group RFP for Home Assistance Program provider in 2011. Due to the delay in schedule release, and the time required for the RFP process, BPI was not in market in 2011, however launched in early 2012.

Appendix B: Pre-2011 Programs

ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

Initiative Frequency: Year Round

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

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

Targeted End Uses: Electricity savings measures

Delivery: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year round

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

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

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

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

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 is 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.