ENWIN Utilities Ltd.

Conservation and Demand Management

2014 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2015

TABLE OF CONTENTS

Executive Summary

This annual report is submitted by ENWIN Utilities Ltd. ("ENWIN") in accordance with the filing requirements set out in the Conservation and Demand Management ("CDM") Code for Electricity Distributors, issued September 16, 2010, Board File No. EB-2010-0215 specifically, the Appendix C Annual Report Template, as a progress report and update to ENWIN's Strategy filed with the Ontario Energy Board ("Board" or "OEB") on November 1, 2010. Accordingly, this report outlines ENWIN's CDM activities for the period of January 1, 2014 to December 31, 2014. It includes net peak demand and net energy savings achieved in 2011, 2012, 2013, and 2014, CDM program activities, successes and challenges.

ENWIN did not apply for any Board-approved CDM programs during 2014 however, as noted in the Guidelines for Electricity Distributors Conservation and Demand Management ("CDM Guidelines"), released April 26, 2012, the Board has deemed Time-of-Use ("TOU") pricing to be a province-wide Board-approved CDM program. The Ontario Power Authority ("OPA"), now Independent Electricity System Operator ("IESO"), was to provide measurement and verification on TOU. The IESO allocated 1,105 kW TOU savings to ENWIN's 2011 -2014 targets.

In 2011 – 2014, ENWIN contracted with the IESO to deliver a portfolio of IESO province-wide CDM programs ("IESO Programs") to all customer segments including residential, commercial, institutional, industrial and low income. Most of these programs were rolled-out by the IESO in June 2011.

In 2011, Program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012, the first 2 quarters were used to ramp up some of ENWIN's 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 ENWIN's 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; and ENWIN communicated with the OPA for funding through the Conservation Fund Initiative and was approved to submit a Business Case, however, was unsuccessful in attaining approval for funds to implement a pilot project for Residential LED Lighting, as it was subsequently deemed to be a duplication of an existing program.

In 2013, ENWIN's momentum towards program awareness and delivery to ENWIN's customers reached a steady stride. Several creative customer outreach events were organized to raise awareness of the saveONenergy suite of programs to ENWIN's Commercial and Industrial customers. These included a Large Electricity Account Forum which included among other topics, presentations from the OPA and the IESO on Conservation and the Long Term Energy Plan. As well, ENWIN, in coordination with 3 neighbouring LDC's, organized its' first saveONenergy Show and Symposium in which conservation related vendors showcased their services, and Presenters from the OPA, as well as, industry experts educated area Commercial and Industrial customers on Conservation initiatives. ENWIN also partnered with the OPA, the IESO, Union Gas and Natural Resources Canada to offer NRCan Energy Sessions entitled "Spot the Energy Savings" geared towards ENWIN's Commercial and Industrial customers. ENWIN also acknowledged a large Industrial customer for their commitment to energy conservation by awarding ENWIN's GreenSTAR Award, as well as, showcasing this customer through the OPA's Case Study publication.

ENWIN participated in Local Home Shows to promote saveONenergy for Home programs to ENWIN's Residential customers, as well as, promoted the OPA Coupon Event through representation at participating retailer locations.

ENWIN launched a Safety and Conservation School Program that was delivered to Elementary Schools within ENWIN's service territory throughout 2013 to educate students on the importance of energy conservation, water conservation and electrical safety. This program received excellent reviews from the school teachers surveyed.

With the successful launch of the Home Assistance Program in 2012, ENWIN saw a 76% increase in completed projects in 2013 which equated to 165 kW of peak demand reduction and 1.57 GWh of energy reduction in 2013.

The ERII Program continued to be a large contributor to ENWIN's achievement of target savings. This initiative represents 73% of the peak demand savings and 80% of the energy savings achieved throughout 2013. This is a 76% increase from 2012 and ENWIN continued to receive a steady influx of applications in 2014.

In 2014, the momentum in providing program awareness and delivery continued. A request was made to the IESO for an increase in PAB funding permitted by the terms of the CDM Program Master Agreement (Section 4.3) and was approved.

Several Customer outreach events were repeated such as the partnering with 3 surrounding LDC's to host a saveONenergy Show and Symposium in which conservation related vendors again showcased their services, as well as, a presentation by the Environmental Commissioner of Ontario, Mr. Gord Miller, took place. ENWIN took part in Home Shows to provide awareness of the saveONenergy suite of program offerings, as well as, promote PeaksaverPLUS sign-ups and took part in promoting the saveONenergy Fall Coupon Event at 2 Retailer locations. A customer outreach forum was held to inform customers on Time of Use rates and billing and ENWIN participated in undertaking a customer survey relating to interest in participating in saveONenergy residential programs.

ENWIN acknowledged a large industrial manufacturing customer for their commitment to energy conservation by awarding ENWIN's GreenSTAR Award. This award showcases customers that have made an environmental impact by utilizing the saveONenergy Programs. Since 2009, 7 customers (3 within the 2011-2014 Framework) representing the Commercial & Institutional and Industrial customer sectors, have been acknowledged with this award.

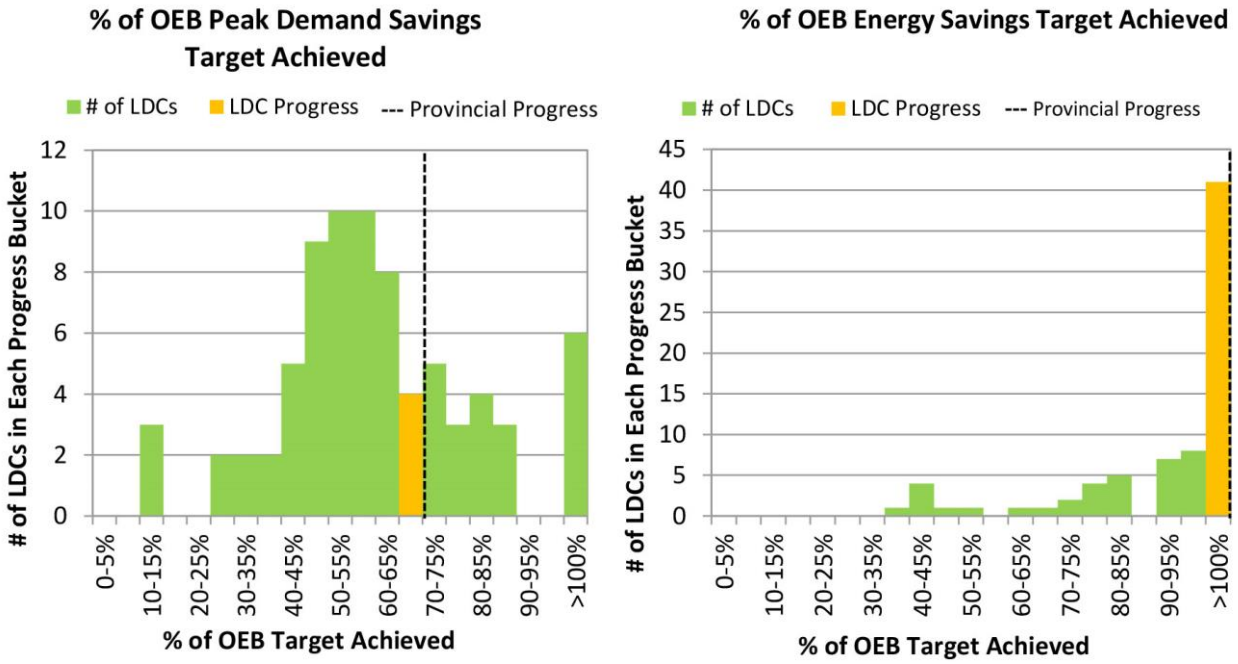
A CDM Awareness Campaign was launched to attract uptake in the Equipment Replacement Incentive Initiative (ERII) Commercial Program, in which mailings addressed to commercial customers were sent and a contest ("Retrofit is Right") to receive dollars towards a future ERII Project was offered. Also, a new initiative was introduced entitled "The Certified Applicant Representative (CAR)" program. Through the CAR initiative, the CDM group sought to encourage additional participation in the saveONenergy^{OM} RETROFIT program by offering financial incentives to the supply chain (suppliers, distributors, contractors, etc.) for the submission of complete and accurate RETROFIT applications.

Also in 2014, ENWIN offered 2 innovative and internationally recognized training opportunities to ENWIN's larger commercial and industrial customers. One was the "Compressed Air Challenge" course developed by the U.S. Department of Energy and the other was the "Pump Systems Matter" course developed by the Hydraulic Institute. Both were very well received with 87 attendees over the three day Compressed Air Challenge Course and 28 attendees at the Pump Systems Matter Course. The attendees were representative of a mix of customers, vendors, and LDC staff.

The Home Assistance Program ("HAP") successfully gained momentum throughout 2014 with ENWIN's projected uptake being surpassed. In conjunction with HAP, ENWIN launched a Water Conservation Pilot. The Pilot was rolled out with HAP, offering this same customer base, water conservation measures through the Conservation Fund Mechanism provided by the IESO.

To date ENWIN has achieved 9.2 MW of net incremental peak demand savings and 22.7 GWh of net incremental energy savings in 2014. A summary of the achievements towards the CDM targets is shown below:

ENWIN Utilities Ltd.	Final 2014 Achievement Against Targets		
	2014 Incremental	2011-2014 Achievement Against Target (Scenario 1)	% of Target Achieved
Net Annual Peak Demand Savings(MW)	9.2	17.5	65.4%
Net Energy Savings (GWh)	22.7	153.9	130.5%
Scenario 1 = Assumes that demand response resources have a persistence of 1 year.			



From the above table and charts, ENWIN has achieved 17.5 MW or 65.4% and 153.9 GWh or 130.5% towards ENWIN's 2011-2014 peak demand reduction target and energy consumption reduction targets respectively. The shortfall of peak demand targets were mainly due to the late start of programs, cancellation of planned province wide programs including Direct Space Cooling since 2011 and no replacement or new province wide programs. As well, ENWIN's service territory was subsequently designated a "Discounted Zone" for the purposes of the Demand Response 3 Program, reducing customer incentives and negatively impacting uptake in this program for which ENWIN had forecasted a 8 MW savings within ENWIN's CDM Strategy. The overachievement of energy targets were mainly due to considerable effort expended by ENWIN, with the cooperation of ENWIN's channel partners, other LDC's and ENWIN's commercial, institutional and industrial customer base; a customer base that comprises approximately 105% of ENWIN's energy savings realized.

In 2015, the Conservation First Framework (2015-2020) will commence upon the approval of the CDM Plans submitted to the IESO on May 1, 2015 and the start date specified within the Plan by the LDC. ENWIN's CDM Plan was conditionally approved by the IESO on July 17, 2015 and the associated start date specified by ENWIN is January 1, 2016. To ensure a smooth transition, most 2011- 2014 Programs and Rules were extended into 2015 until the effective implementation start date specified by each individual LDC under the Conservation First Framework.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the OEB to establish Conservation and Demand Management ("CDM") targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of LDC's to require LDC's, as a condition of its license, 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 licenses. 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 of 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 fourth Annual Report by ENWIN and has been prepared in accordance with the Code requirements and covers the period from January 1, 2014 to December 31, 2014.

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 IESO, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I and II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the IESO to fund CDM programs which meet the definition and criteria for IESO-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.

ENWIN submitted its 2013 Annual Report on September 30, 2014 which summarized the CDM activities undertaken by ENWIN for the January 1, 2013 to December 31, 2013 period. The OEB's 2013 CDM Results report identified that the majority of LDCs achieved close to 50% of their net peak demand (MW) target from their 2013 results. However, LDCs generally advised the Board that meeting their peak demand (MW) target is not likely and that a shortfall is expected.

In 2014, LDCs collectively achieved approximately 19.5% of the energy savings (GWh) target, adding to the overall cumulative result of approximately 109.2% of the net energy target of 6,000 GWh.

The report identifies that although there have been improvements to programs there still remains some shortcomings to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. In particular, the change management process still requires improvements to expedite enhancements to initiatives. The report also noted that certain initiatives may be reaching the point of market saturation and that new initiatives may need to be developed in order to take the place of the existing initiatives under the new framework.

1. Conservation Framework

1.1 2011-2014 Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Ontario Government ("Government") 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, supports the provincial integrated supply plan, and addresses local distribution and transmission supply constraints. The past framework was intended to enable customers to benefit from a suite of both Board-approved and IESO province-wide programs and provide a portfolio that would meet both broad and specific customer needs.

The state of Board-approved programs and the current suite of province-wide IESO 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, involving considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Challenges faced by LDCs in the 2011-2014 framework, such as overbuilt governance, excessive legal requirements and misalignment of control and risks, have been addressed by the new directive. However, there are still many challenges to overcome and the new CDM framework should address these challenges and build on the strengths of the current Framework.

1.2 Conservation First Framework

LDCs are supportive of the Government's renewed commitment for CDM in Ontario. LDCs are committed to working with the Government, IESO, Natural Gas Utilities and other stakeholders to develop programs for the new framework for CDM in the Province.

Long-term commitment for CDM funding and confirmation of the role of LDCs have been provided in the Minister's directive dated March 31, 2014, allowing LDCs to maintain current program infrastructure, including LDC staff and third party contracts as required.

The commitment also provided LDCs the program extensions required for continuity into the Conservation First Framework which was critical for all customers.

2. Board-Approved CDM Programs

2.1 Introduction

In its Decision and Order dated November 12, 2010 in EB-2010-0215 and 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, IESO-contracted province-wide CDM programs, or a combination of the two".

At this time, the implementation of TOU pricing is the only Board-approved CDM program that is being offered by ENWIN.

2.2 TOU Pricing

2.2.1 Background

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

In accordance with the Ministry directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluation of savings from TOU pricing should be conducted by the IESO for the Province, and then allocated to distributors. ENWIN has reported these results received from the IESO within this report.

In 2013, IESO had retained the Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide advice on methodology, data collection, models, savings allocation, etc. The initial evaluations were conducted in 2013 with five LDCs – Hydro One Networks Inc., Toronto Hydro-Electric System Limited, Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc. and Newmarket-Tay Power Distribution Ltd. Preliminary results from these five LDCs were issued to the five LDCs involved in the study in August 2013 and are now publically available on the IESO website. Preliminary results demonstrated load shifting behaviours from the residential customer class.

Three additional LDCs were added to the study in 2014 – Cambridge-North Dumphries, PowerStream and Sudbury. Preliminary results from this study are planned to be issued to the eight LDCs in September 2014. The IESO advised that the TOU study would be completed in the summer of 2015 and final verified savings have been made available for LDCs to include in the 2014 Annual Report.

2.2.2 TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-round

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

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

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided below in Table 1.

Table 1: RPP TOU Pricing Summary

	Prices (cents/kWh)		
Effective Date	**On Peak**	**Mid Peak**	**Off Peak**
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7
November 1, 2013	12.9	10.9	7.2
May 1, 2014	13.5	11.2	7.5
November 1, 2014	14.0	11.4	7.7

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

2.2.3 TOU Initiative Activities/Progress

ENWIN began transitioning its RPP customers to TOU billing on April 1, 2014. At December 31st, 2014, 80,366 RPP customers were on TOU billing. ENWIN held a TOU Forum to inform customers on TOU billing and rates. ENWIN promoted this initiative through radio advertisements and billing inserts.

2.3 ENWIN's Application with the OEB

ENWIN did not submit a CDM program application to the OEB in 2014.

2.4 ENWIN's Application with the IESO's Conservation Fund

In 2013, the IESO introduced the Conservation Fund's Program Innovation stream to help meet LDC's interest in the development and launch of new local, regional and province-wide initiatives. The Conservation Fund's LDC Program Innovation stream fast-tracks LDC-led program design and the launch of successfully piloted initiatives prior to full scale deployment. By driving program innovation through the Conservation Fund, LDCs have the opportunity to both realize additional savings through the piloting and implementation of initiatives not currently addressed by the IESO portfolio and

the means to test concepts for future local or province wide programs post 2014. As per the IESO, as of March 2014, three pilots had been contracted and were underway with Toronto Hydro and Niagara Peninsula Energy. Ten others were in various stages of the contracting and development process.

In addition, building on LDC interest in social benchmarking services for the residential sector, in 2013 the Conservation Fund in collaboration with Hydro One, Milton Hydro and Horizon Utilities completed the procurement of three social benchmarking pilot projects. Beginning in 2014 these services were offered to more than 100,000 customers for a one year period, with evaluation reports published shortly thereafter.

ENWIN submitted a CDM program application to the IESO's Conservation Fund in 2014 as mentioned above. The Pilot program was an extension of the successful Home Assistance Program and introduced water savings measures. The purpose of the pilot was to test the integration of delivering both electrical and water measures. As well as, determining the downstream electrical savings (treatment facilities) of water conservation.

3 IESO-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective February 21, 2011, ENWIN entered into an agreement with the IESO to deliver CDM programs extending from January 1, 2011 to December 31, 2014. The programs included under this agreement are listed in Table 2 below. Further program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in or after 2011:

Table 2: IESO-Contracted Province-Wide CDM Program Initiatives

Initiative	Schedule-found on saveONenergy website	Date schedule posted	ENWIN in Market Date
Residential Programs			
Appliance Retirement	Schedule B-1, Exhibit D	*Jan 26,2011*	*Jan. 1, 2011*
Appliance Exchange	Schedule B-1, Exhibit E	*Jan 26, 2011*	*Jan. 1, 2011*
HVAC Incentives	Schedule B-1, Exhibit B	*Jan 26, 2011*	*Jan. 1, 2011*
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	*Jan 26, 2011*	*Jan. 1, 2011*
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	*Jan 26, 2011*	*Jan. 1, 2011*
Retailer Co-op	n/a	*n/a*	*Jan. 1, 2011*
Residential Demand Response	Schedule B-3	*Aug 22, 2011*	*Mar. 2013*
New Construction Program	Schedule B-2	*Jan 26, 2011*	*Mar. 1, 2011*
Home Assistance Program	Schedule E-1	*May 9, 2011*	*Feb. 1, 2012*
Commercial & Institutional Programs			
Efficiency: Equipment Replacement	Schedule C-2	*Jan 26, 2011*	*Feb. 1 2011*
Direct Install Lighting	Schedule C-3	*Jan 26, 2011*	*May 1, 2011*
Existing Building Commissioning Incentive	Schedule C-6	*Feb 2011*	*Mar. 1, 2011*
New Construction and Major Renovation Initiative	Schedule C-4	*Feb 2011*	*Jan. 23, 2012*
Energy Audit	Schedule C-1	*Jan 26, 2011*	*Jun. 1, 2 011*
Commercial Demand Response	Schedule B-3	*Jan 26, 2011*	*Mar. 1, 2011*
Industrial Programs			
Process & System Upgrades	Schedule D-1	*May 31, 2011*	*Nov. 1, 2011*
Monitoring & Targeting	Schedule D-2	*May 31, 2011*	*Nov. 1, 2011*
Energy Manager	Schedule D-3	*May 31, 2011*	*Dec. 3, 2012*
Key Account Manager ("KAM")	Schedule D-4	*May 31,2011*	*Nov. 1, 2011*
Demand Response 3	Schedule D-6	*May 31, 2011*	*Jan. 1, 2011*

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

- Electricity Retrofit Incentive Program
- High Performance New Construction
- ENWIN Green Suites
- Residential Demand Response

As per the table below (Table 3), several program initiatives are no longer available to customer or have not been launched.

Table 3: IESO Programs Not in Market

Not in Market	Objective	Status
Residential Program		
Midstream Electronics	Encourages retailers to promote and sell high efficency televisions, and for distributors to distribute high efficiency set top boxes.	Did not launch and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	Encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Did not launch and removed from Schedule in Q2, 2013.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Did not launch and removed from Schedule in Q2, 2013.
Commercial & Institutional Program		
Direct Service Space Cooling	Offers free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Did not launch.
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 between LDCs and the IESO includes a program change management provision in Article 3. Collaboration between the IESO and LDCs commenced in 2011, and continued in 2012, 2013 and 2014, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master CDM Program 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 descriptions of IESO-contracted province-wide CDM programs are available on the IESO's intranet LDC 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. Discussion of LDC's experience with these programs is provided below.

3.2.1 RESIDENTIAL PROGRAM

Description: Provides residential customers with programs and tools to help them understand and manage the amount of energy they use in their 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 addition of Light Emitting Diode ("LED") technology into the bi-annual retailer events in 2012 and the annual coupons in 2013, as well as LDC custom coded coupons, has had a positive effect on consumer engagement and provided LDC with opportunities to achieve additional savings in their service territory. The Residential Demand Response 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 ("IHD") to help manage their energy consumption. Unfortunately, there are no savings associated with the Energy Display attributed to LDCs in the IESO's verified results to date.

The Heating and Cooling incentives program continues to be one of the strongest performers in the residential suite of programs. This program is mainly driven by contractors participating in the program but they may not always deliver results in the required manner (e.g. allowing customers to apply for their own incentives and tardy reporting).

The Residential Program Portfolio is predominately a carryover of initiatives from previous programs. 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' abilities to engage customers and promote participation. Province-wide advertising has provided value in all residential programs except for *peaksaver* **PLUS**® due to technological inconsistencies across LDCs.

Work to revitalize and increase the effectiveness and breadth of the initiatives through the residential program needs to be a high priority. There are opportunities within the residential marketplace that need to be addressed, programs developed and offered to customers. The Version 5 schedule changes under the Master Agreement implemented in Q1/Q2 2014 have increased the number of LDC-coded coupons available and made new installations of central heating and cooling systems eligible for the Heating and Cooling Incentive.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress: This program is largely administered by the IESO therefore ENWIN's activities involve complementing the IESO's province-wide marketing and advertising efforts. ENWIN has marketed this initiative through ENWIN's website and distribution of program materials at local Home Shows.

Additional Comments:

- Due to the duration of the program, and the revised appliance eligibility requirements to a minimum age of 20 years old (later revised in Q2), this initiative appears to have reached market saturation and has been under consideration for removal from the portfolio.
- In an effort to capture additional savings in the perceived last year of the initiative, the eligibility requirement for refrigerators was revised from 20 years old back to 15 years old in Q2 2014.
- As results are very responsive to province-wide advertising, should this initiative continue, the IESO's provincial marketing should continue to play a key role.
- Better relationships with retailers may play a role in increasing participation in this initiative. Retailers can provide opportunities to capture replacement appliances and have them decommissioned after a sale has been committed.
- Due to the announcement by the IESO that the Appliance Retirement program was going to cease at the end of 2014, many LDCs lowered (or removed) their marketing support for the program.

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 did not participate in these retailer events in 2014.

Additional Comments:

- The design of the initiatives, including eligible measures and incentives amounts are developed through the Residential Working Group. Retail partner(s) are contracted by the IESO to deliver the initiatives province-wide. Individual LDCs have the opportunity to stage in-store events to drive the distribution of LDC coded coupons and promotion of other programs in the portfolio.
- This initiative, eligible measures and incentive amounts are influenced by the retail partner with very limited 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.

- Evaluation, Measurement, and Verification ("EM&V") results indicated that the value of savings for retired room air conditioners ("AC") has dropped resulting in the retail participant not accepting window ACs during the Spring 2013 event.
- Notification to LDCs regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.
- This initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of the IESO's contractor for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress: Participation in this initiative has remained in line with 2013 although decreased substantially from 2011 participation levels. ENWIN continued to market this initiative through ENWIN's website and distribution of program materials at local Home Shows.

Additional Comments:

- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to end of useful life. An Air Miles incentive was introduced in 2013 to try and encourage early replacement.
- This initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and central air conditioner sales to eligible units.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match the value of the IESO incentive) to make the sale. As this occurs outside of the initiative, savings are not credited to LDCs. IESO should consider this in future program impact evaluation studies.
- Changes to the schedules in 2014 to allow for incentives for new installations, rather than strictly replacement units, may prove to be effective in providing greater results. Therefore increasing provincial participation by 20% over 2013 results.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress: Take up within this initiative increased substantially from prior years, doubling 2011 activity levels. ENWIN promoted this initiative through ENWIN's website, radio ads and distributing coupons at local Home Shows.

Additional Comments:

- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer, and in some cases has been lengthy. The delays and incomplete results reporting, limits the ability to react and respond to initiative performance or changes in consumer behaviour.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon initiatives, should be a regular activity to ensure continued consumer interest.
- All coupons have been provided with LDC custom coding in 2014 which allows LDCs to promote coupons based on local preferences. However, LDCs were not provided with customer coded coupon results until early 2015 and thus, had no indication of their redemption rates.
- Consumer experience varies amongst retailers offering coupon discounts which can limit redemptions. For example, a particular high volume 'participating retailer' does not accept coupons and have their own procedure. In addition, some retailers have static lists of eligible products and will not discount eligible products unless the product is on the list.
- The saveONenergy programs would benefit from specific end cap displays, aisle product stands and product-specific areas. Having products throughout a retail environment weakens the impact.

3.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)

Initiative Activities/Progress: Take up within this initiative has increased substantially from prior years. ENWIN promoted this initiative by participating through a 3rd party service provider, at 2 retailer stores for the Fall Coupon Event.

Additional Comments:

- This initiative is strongly influenced by the retail participants.
- LDCs have the opportunity to stage in-store events to drive the distribution of LDC-coded coupons and promotion of other programs in the portfolio; however, this requires cooperation from the local retailer and LDC staff resources.
- The product list has had minimal changes 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 EDA Residential Working Group in 2011 identified three areas of need for this initiative's evolution: 1) introduction of product focused marketing; 2) enhanced product selection; and 3) improved training for retailers, as retail staffs tend not to be knowledgeable regarding the products or promotion.
- This initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.
- Independently, the Retailer Co-op and Bi-Annual Retailer Event Initiative may not present a value for the investment of LDC resources to support these events and should be backed by a strong residential portfolio.

3.2.1.6 Retailer Co-op

Initiative Activities/Progress: ENWIN did not take part in retailer events for this initiative in 2014.

Additional Comments:

- This is a retailer initiative with no direct benefit to 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 ENWIN's website. ENWIN did not have participation in this initiative in 2014, however generated interest and participation within 2015.

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 consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- In 2012 the application process was streamlined, however continues to be too cumbersome for builders. This, combined with limited return, has resulted in this initiative continuing to under-achieve.
- Administrative requirements, particularly with individual home modeling, must align with perceived stakeholder payback.
- The addition of LED light fixtures, application process improvement, and moving the incentive from the builder to the home-owner may increase participation.
- This initiative may benefit from collaboration with the natural gas utilities.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress: The PeaksaverPLUS program was launched in 2013. In 2014 program participation increased from 2013 levels. ENWIN promoted this initiative at local Home Shows and also at Retailer locations during the Fall Coupon Event, by providing a display of the thermostat and in-home display unit and the ability to sign up for the program. ENWIN also advertised this program in a local Publication and through a billing insert to ENWIN customers.

Additional Comments:

- Energy and demand savings have not been reported for the IHD portion of the program as 2013 EM&V results have determined zero savings associated with the IHD. IESO conducted another study in 2014, expanding its study territory beyond those included in the 2013 study, to provincial rather than regional results. Results from the second study again determined the savings to be zero.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an IHD. This might not be possible at all times or when IHD is optional.
- Smart meters installed by most LDCs do not have the capability to communicate directly to an IHD and any mass replacement of newly installed meters with communicating abilities is not fiscally responsible. When proposing technical initiatives that rely on existing LDC infrastructure or technology there should be an extensive consultative process in order to prevent this type of problem in the future.
- 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.
- Given the different LDC smart meter environments and needs, each LDC is providing the initiative with subtle differences. As such, greater program flexibility is required to address unique LDC needs.
- Some participants found the IHD unit to be non-user friendly as it requires programming by season and therefore in these cases not used, providing little impact to behavioral changes in energy consumption.
- In the initial rollout stage of this initiative, ENWIN experienced many challenges and delays associated with the settlement process with the IESO.

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

Targeted Customer Type(s): Commercial, institutional, agricultural, multi-family buildings, industrial.

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

Discussion:

Throughout 2014 the Commercial and Institutional ("C&I") Working Group continued its efforts 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, limited marketing ability, a somewhat inflexible online system of checks and balances and revolving IESO support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the IESO, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment in 2012 was the advent of the expedited change management as a means to accelerate certain program changes. The benefits of expedited change management process were seen in 2013 and carried over into 2014.

Looking ahead there is an opportunity to make valuable changes to the current program suite for the Conservation First Framework, but LDCs and the IESO should look beyond the current initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, which will meet the needs of the industry and consumers.

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

Initiative Activities/Progress: In 2014, 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 2014, ERII contributed more than 1.6 MW in peak demand savings and 10 GWh in energy savings towards ENWIN's 2011-2014 savings targets. Also, a new initiative was introduced entitled "The Certified Applicant Representative ("CAR")" program. Through the CAR initiative, the CDM group sought to encourage additional participation in the saveONenergy^{OM} RETROFIT program by offering financial incentives to the supply chain (suppliers, distributors, contractors, etc.) for the submission of complete and accurate RETROFIT applications. The initiative launched on January 31, 2014 and wrapped up as of December 31, 2014. Throughout the course of the initiative, the CDM group received 167 applications from Certified Applicant Representatives which represents approximately 1.79 MW in peak demand reduction and 9.26 GWh in energy reduction. Additionally, the program rewarded the Certified Applicant Representatives for their participation in the RETROFIT program with $87,127 in incentives.

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 LDC savings are attributed to ERII.

- Capability building programs from industrial programs have had very positive contributions to ERII program.

- A number of customer-facing issues in iCon (the IESO's centralized application system) have been resolved; however, key LDC administrative back office processing issues continue to be a challenge. For example, currently LDCs are unable to record back office information to complete review and approval process using iCon.

- 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 ("KAMs"), channel partner/contractor training and LDC staff acting as customer application representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, applicant representatives continue to influence the majority of applications submitted. Continued development of channel partners is essential to program success.

- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the mechanical sector. There continues to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners.

- Prescriptive and engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.

- A focus on demand incentives has limited some energy project opportunities. In particular, night lighting projects have significant savings potential for customers but tend to have incentives of 10% or less of project cost.

- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.

- There is redundancy in the application process as customers may need to complete a worksheet and then enter most of that information over to the online application form. This can be cumbersome.

- Processing head office applications became much easier for the lead LDC after schedule changes came into effect in August 2013. The changes implemented allowed the lead LDC to review and approve all facilities in a head office application on behalf of all satellite LDCs under certain circumstances.

- The application process for head office projects remains a significant barrier. Applicants need to manually enter one application per facility associated with the project which can be extremely onerous, often requiring a dedicated resource.

- Streamlining of the settlements systems resulted in significant improvement in the payment process in 2013.

- LDCs struggle to repair customer and channel partner relationships and gain momentum in the market place once again.

- IESO implemented a cut-off date of July 31, 2014 for approval of 2014 social housing adder ("SHA") under ERII program. IESO had instructed that any SHA applications submitted to IESO after July 31, 2014 will not be honored for SHA; however, they failed to mention that this was the timeline to submit the funding request to the IESO by the LDCs and not the submission date of the applications to IESO's ICON system by the Applicant (Customer). As a result there was

some confusion and some of the applications that were submitted to IESO's iCON by July 31, 2014 but where LDCs submitted the funding request to IESO at a later date (once LDCs have completed review of the applications), were not honored for SHA. Additionally, the formal letter confirming that the SHA annual allocation had been exceeded was received by Conservation Officers on July 15, 2014 leaving them only 15 days to inform the customers and this created a negative customer experience.

- The handling of the exterior lighting incentives was a negative customer experience. In the fall of 2014 a new section was introduced in the prescriptive Lighting worksheet. It offered generous incentives for some exterior lighting projects and many municipal customers took advantage of the available incentives. Within 2 weeks of introducing the incentives, several incentives were suddenly removed for approximately a 6 week period until new incentives were created. This was due to $/kWh incentive being too high for some of the measures. This caused a negative customer experience in several ways:
    - Some customers were planning on applying for the rebates related to the exterior prescriptive lighting measures based on the incentives offered but were suddenly not allowed to apply for these rebates.
    - The length of time from pulling out the exterior prescriptive lighting incentives to offering new incentives was too long. An in-term incentive level should have been made available to allow LDCs to take in new applications.
    - The incentive values should have been introduced at an appropriate level at the onset. While market conditions can change, the incentives offered should have been researched and approved with the expectation that they would be in place for at least 6-12 months.
- Introduction of several new prescriptive measure worksheets, including Plug Loads and Refrigeration, were introduced in September 2014 which allowed for new opportunities, albeit late in the framework.
- The Ministerial Directive provides continuity of the conservation programs for the participant, with clear direction on LDC administrative funding for 2015, which helps to avoid a gap in program delivery.

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

Initiative Activities/Progress: In 2014, ENWIN observed a significant increase to program participation. This was largely due to an aggressive marketing campaign which was run in the mid to latter part of the year. As a result, DIL contributed 292 kW of demand savings and over 1 GWh of energy savings towards ENWIN's 2011-2014 savings targets.

Additional Comments:

- LED lighting was introduced in 2013 as a new measure and has been well received by customers who may not have previously qualified for DIL eligible upgrades. This is an efficient product with a long estimated useful life.
- Successful execution of the previous version of this initiative has resulted in reduced potential for the 2011-2014 initiative in some LDC's territories.

- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations. However, 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.

- Many customers are not taking advantage of any additional measures, which may present an opportunity for future savings with a new program offering.

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.

- There was minimal participation for this initiative. It is suspected that the lack of participation in the program is a result of the initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.

- Participation is mainly channel partner driven, however the particulars of the initiative have presented too much of a significant barrier for many channel partners to participate.

- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning and chilled water systems used for other purposes should be made eligible and considered through change management.

- This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

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

Initiative Activities/Progress: ENWIN continues to see modest uptake in this initiative. In 2014, ENWIN saw 2 HPNC projects complete resulting in 33 kW in peak demand savings and 94,083 kWh in energy savings. 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 existing economic climate in the Windsor/Essex region has resulted in reduced new developments.

Additional Comments

- With the Ministerial Directive issued December 21, 2012, facilities with a completion date near the end of 2014, gives customers some confidence that they will be compensated for choosing efficiency measures.

- Participants have until the end of 2014 to submit their applications for the projects that will be completed in 2015. However savings achieved will be accounted for in the new framework (2015 - 2020).
- The custom application process requires considerable customer support and skilled LDC staff. The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- There are no custom measure options for items that do not qualify under the prescriptive or engineered track as the custom path does not allow for individual measures, only whole building modelling.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and a potential barrier to participation.

3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress: Very low uptake was observed in this initiative, with only 3 audits being completed in 2014. ENWIN continues to market this initiative to all of its Commercial and Institutional customers, as well as, to channel partners to promote participation. This initiative may benefit from a review to further incent participants to undertake energy saving projects identified within the completed audits.

- The introduction of the new audit component for one system (i.e. compressed air), has increased customer participation.
- The energy audit Initiative is considered an 'enabling' initiative and 'feeds into' other saveONenergy initiatives.
- LDCs are receiving some savings towards their targets from an audit which is mainly attributable to operational savings.
- 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 savings calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the IESO may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other initiatives. This has been revised in 2014 and LDCs are now able to consider additional customer participation when presented with a new scope of work.
- Consideration should be given to allowing a building owner to undertake an audit limited to their lighting system. This way they may receive valuable information from a neutral third party regarding the appropriate lighting solution for their facility instead of what a local supplier would like to sell.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and a potential barrier to participation

3.2.3 INDUSTRIAL PROGRAM

Description: Owners of 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:

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

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 KAM and the industrial project supervisors have also been instrumental in managing the embedded energy managers ("EEM") during the first and second half of the year respectively, and promoting activity to the Class A customers.

Due to the size, scope and long lead time of these initiatives and associated projects, the December 2012 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 an LDC's current target for projects that go into service after 2014.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this portfolio. While the expedited change management has benefited the commercial portfolio, the industrial portfolio has not seen the same results due to the narrow scope of the process. For 2013 the change to the threshold for small capital projects and the new small capital project agreement improved the number of projects and savings achieved within Process and Systems Upgrades Initiative ("PSUI"). Likewise, a decision to proceed with applications for natural gas load displacement generation projects also increase uptake, although the limited time to bring new projects into service is a barrier.

The IESO/OPA created significant issues in the industrial electricity customer sector due to an excessively long approval process related to Combined Heat & Power behind-the-meter engineering studies. The IESO's necessity to perform "Capacity Connection Screening" delayed studies in excess of 6 months in some cases, reflecting very poorly upon LDC's and creating confusion and dissatisfaction for Program participants. Furthermore, the delay in the Study phase led to many

projects being ineligible for completion before the end of the current framework, thereby transferring these larger incentive payments to the LDC's Conservation First Framework budgets on completion of these projects.

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

Initiative Activities/Progress: During calendar year 2014, ENWIN continued to engage all electrical Key Accounts and large energy users. As a result, 10 Preliminary Engineering Studies and 6 Detailed Engineering Studies were approved for funding. As well as, 3 Small Capital Incentive projects were received from 3 large use customers.

Additional Comments:

- Numerous energy studies have been submitted and completed. This is a strong indication that there is potential for large projects with corresponding energy savings. Most of these studies have been initiated through Energy Manager and Key Account Manager ("KAM") resources.
- This initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and a long project development cycle. As such, limited results are expected to be generated in 2014. The majority of the results are expected in 2015 with a much reduced benefit to cumulative energy savings targets.
- Delays with processing funding payments have caused delayed payments to participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and participant acknowledging that the participant cannot be paid until the funds are received.
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is the new agreement for 'small' projects with simplified and less onerous conditions for the customer.
- To partially address this, changes were made to the ERII program which allowed smaller projects to be directed to the commercial stream. Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements. Therefore, PSUI engineering studies and LDC's industrial resources (e.g., Energy managers, KAMs) contribute significant savings to other programs such as ERII.
- A business case was submitted by the Industrial Working Group in July 2012 which changed the eligibility for a small project from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. This small capital project agreement was finalized through change management in September 2013.
- With the considerable customer interest in on-site load displacement (co-generation) projects, the initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI Initiative. The IESO was reviewing waste heat projects only and all other co-generation projects were on hold prior to June 2013, when a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects may proceed, although results may not be counted towards LDC 2011-2014 framework target unless applications are submitted before the end of 2014 and the projects are in service before December 31, 2015.

- The requirement for customers to invoice the LDC and provide proof of payment to consultants for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.

3.2.3.2 Monitoring and Targeting ("M&T") Initiative (Schedule D-2)

Initiative Activities/Progress: ENWIN saw one application for the M&T initiative. Due to the scope of the project, significant delays were experienced and the participant was required to approach the project in stages. Due to the delays, it is unlikely the participant will be able to complete the contractual obligations.

Additional Comments:

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an energy manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, only five applications have been completed in 2014 across the province.
- The savings target required for this initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes were made to ERII to allow smaller facilities to employ M&T systems.

3.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress: In 2014, ENWIN saw increased demand (new or renewal applications) for Embedded Energy Managers grow to 7 large customers. Unfortunately, due to various constraints, only 4 EEM's were in place during 2014. The Energy Manager Initiative is extremely successful and it is anticipated that more participants will continue to benefit from this program initiative.

Additional Comments:

- The Embedded Energy Managers ("EEMs") have proven to be a popular and useful resource for larger customers. There are approximately 50 EEMs and 22 Roving Energy Managers ("REMs") being utilized by customers across the province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire a REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- There have been a number of studies identified by energy managers and they have been able to build capacity and deliver energy savings projects within their respective large commercial/industrial facilities.

- The requirement that 30% of targets must come from non-incented projects is identified as an issue for most EEMs/REMs. The EDA Industrial Working Group has proposed to remove this requirement for REMs only, as they are not resident at a customer facility on a full time basis to find the non-incented savings.

3.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress: ENWIN's KAM actively pursued Key Accounts to identify opportunities for energy saving projects. Key Account customers benefited from the single point of contact within the LDC.

Additional Comments

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- Finding this skill set has been difficult. In addition, the short-term contract and associated energy targets for this program initiative discouraged some skilled applicants, resulting in longer lead times in acquiring the right resource.
- This resource has been found by some LDCs to be of limited value due to the part-time nature of the position and limited funding. In addition, the position role has been too narrow in scope to provide assistance to the wider variety of projects with which LDCs may be struggling.

3.2.3.5 Demand Response 3 ("DR3") (D-6)

Initiative Activities/Progress: Being designated as a "Discounted Zone", ENWIN saw a reduction in participants for the DR3 program. Given the reduced incentive amounts associated with a discounted zone, it was determined by customers that the risk and reward was not proportionate. In 2014, ENWIN had 3 Commercial & Institutional participants and 6 Industrial participants. These participants provided just under 3.0 MWs of contracted capacity.

Additional Comments:

- Until early 2013, customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and confirm savings.
- The Industrial Working Group had a discussion with the IESO and representatives of the Ministry on proposed changes for the DR3 program. No program improvements were made in 2013. 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 (five years) than the previously limited one to two-year contracts. However on March 31, 2014 the Minister of Energy issued a directive entitled "Continuance of the IESO's Demand Response Program under IESO management" which restricts the IESO from granting any more contract schedules to aggregators, as the program is being transitioned from the OPA to the IESO. This decision will prevent the DR3 program from continuing to grow until the IESO is ready to assign DR3 capacity through a new auction process.

- Metering and settlement requirements are complicated and can reduce customer compensation amounts, and present a barrier to some customers.
- Compensation amounts have been reduced from the previous version of this program and subsequently there has been a corresponding decrease in renewal rates.

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.

Although participation levels were down from 2013, ENWIN continued to receive steady participation from Social Housing Providers which represents approximately 75% of the applications received in 2014. With the Social Housing sector reaching saturation in late 2014, ENWIN will continue to market the Home Assistance Program to private homeowners and tenants in 2015.

Additional Comments:

- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and showed benefits since 2013.
- The financial scope, complexity, and customer privacy requirements of this initiative are challenging for LDCs and most have contracted this program out. This initiative may benefit from an IESO contracted centralized delivery agent.

3.2.5 PRE-2011 PROGRAMS

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

4 EnWin 2014 CDM

4.1 Participation and Savings

Table 1: ENWIN Utilities Ltd. Initiative and Program Level Net Savings by Year

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	400	137	101	97	22	8	7	7	165,482	55,074	41,991	41,989	43	953,020
Appliance Exchange	Appliances	97	84	50	74	10	12	10	15	11,796	21,788	18,472	27,339	41	171,216
HVAC Incentives	Equipment	2,054	1,403	1,880	1,930	698	289	354	348	1,305,397	479,899	576,778	632,129	1,689	8,446,973
Conservation Instant Coupon Booklet	Items	7,928	480	5,408	16,102	18	4	8	33	292,537	21,731	119,793	438,729	63	1,913,655
Bi-Annual Retailer Event	Items	14,799	16,489	14,684	74,988	26	23	18	125	456,748	416,248	267,014	1,910,187	193	5,519,949
Retailer Co-op	Items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	621	0	3,959	5,769	348	0	1,747	2,113	0	0	1,621	0	2,113	1,621
Residential Demand Response (IHD)	Devices	0	0	3,693	5,352	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Program Total						**1,122**	**335**	**2,144**	**2,641**	**2,231,960**	**994,741**	**1,025,669**	**3,050,373**	**4,141**	**17,006,434**
Business Program															
Retrofit	Projects	40	102	183	250	250	2,206	2,467	1,615	1,326,534	13,716,462	16,643,765	10,042,616	6,506	89,585,572
Direct Install Lighting	Projects	552	83	61	349	662	61	60	292	1,713,038	234,272	213,705	1,044,364	769	8,171,638
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	0	1	1	2	0	0	7	33	0	0	36,116	94,083	40	166,315
Energy Audit	Audits	2	8	5	3	0	26	44	40	0	125,881	242,254	195,821	110	1,057,972
Small Commercial Demand Response	Devices	33	0	44	79	21	0	28	43	0	0	22	0	43	22
Small Commercial Demand Response (IHD)	Devices	0	0	26	55	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	3	3	3	3	235	236	239	170	9,180	3,428	3,193	0	170	15,801
Business Program Total						**1,168**	**2,529**	**2,845**	**2,193**	**3,048,752**	**14,080,044**	**17,139,055**	**11,376,884**	**7,638**	**98,997,320**
Industrial Program															
Process & System Upgrades	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	1	7	16	0	77	67	329	0	667,663	625,401	4,864,234	435	7,668,231
Retrofit	Projects	8	0	0	0	62	0	0	0	414,515	0	0	0	62	1,658,058
Demand Response 3	Facilities	1	4	7	6	84	1,004	2,917	2,578	4,947	24,195	87,631	0	2,578	116,773
Industrial Program Total						**146**	**1,081**	**2,984**	**2,908**	**419,461**	**691,858**	**713,032**	**4,864,234**	**3,075**	**9,443,062**
Home Assistance Program															
Home Assistance Program	Homes	0	836	1,528	963	0	99	165	104	0	989,326	1,567,966	836,798	366	6,897,013
Home Assistance Program Total						**0**	**99**	**165**	**104**	**0**	**989,326**	**1,567,966**	**836,798**	**366**	**6,897,013**
Aboriginal Program															
Home Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	39	0	0	0	361	0	0	0	2,461,078	0	0	0	361	9,844,311
High Performance New Construction	Projects	2	1	3	0	6	30	191	0	29,977	148,198	566,746	0	227	1,697,996
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDC Custom Programs	Projects	3	0	0	0	317	0	0	0	834,132	0	0	0	317	3,336,527
Pre-2011 Programs completed in 2011 Total						**684**	**30**	**191**	**0**	**3,325,187**	**148,198**	**566,746**	**0**	**905**	**14,878,834**
Other															
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	1,105	0	0	0	0	1,105	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Total						**0**	**0**	**0**	**1,105**	**0**	**0**	**0**	**0**	**1,105**	**0**
Adjustments to 2011 Verified Results							**-34**	**0**	**5**		**36,358**	**0**	**25,125**	**-36**	**228,697**
Adjustments to 2012 Verified Results								**82**	**69**			**409,131**	**596,152**	**151**	**3,031,687**
Adjustments to 2013 Verified Results									**196**				**1,931,375**	**196**	**3,417,560**
Energy Efficiency Total						**2,432**	**2,834**	**3,397**	**4,046**	**9,011,233**	**16,876,544**	**20,920,001**	**20,128,288**	**12,325**	**147,088,445**
Demand Response Total (Scenario 1)						**688**	**1,240**	**4,931**	**4,904**	**14,127**	**27,623**	**92,468**	**0**	**4,904**	**134,218**
Adjustments to Previous Years' Verified Results Total						**0**	**-34**	**82**	**270**	**0**	**36,358**	**409,131**	**2,552,652**	**312**	**6,677,945**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**3,121**	**4,040**	**8,410**	**9,220**	**9,025,360**	**16,940,525**	**21,421,600**	**22,680,940**	**17,541**	**153,900,608**
													Full OEB Target:	**26,810**	**117,890,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**65.4%**	**130.5%**

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

*Includes adjustments after Final Reports were issued

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Table 2: Adjustments to ENWIN Utilities Ltd. Net Verified Results due to Variances

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)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	0	0	0		0	0	0		0	0	0		0	0
Appliance Exchange	Appliances	0	0	0		0	0	0		0	0	0		0	0
HVAC Incentives	Equipment	-326	34	74		-88	7	15		-156,939	12,750	25,324		-66	-538,859
Conservation Instant Coupon Booklet	Items	128	0	16		0	0	0		4,284	0	366		0	17,869
Bi-Annual Retailer Event	Items	1,272	0	0		2	0	0		33,935	0	0		2	135,739
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
Consumer Program Total						**-86**	**7**	**15**		**-118,720**	**12,750**	**25,690**		**-64**	**-385,251**
Business Program															
Retrofit	Projects	1	13	14		1	64	229		10,216	382,979	1,153,254		294	3,494,147
Direct Install Lighting	Projects	44	4	0		40	5	0		95,562	21,649	0		39	425,750
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	1	0		0	3	0		0	5,520	0		3	16,559
Energy Audit	Audits	2	3	0		11	15	0		52,797	74,186	161		26	434,065
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Business Program Total						**53**	**88**	**229**		**158,575**	**484,334**	**1,153,415**		**362**	**4,370,522**
Industrial Program															
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		0	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	0	0		0	56	-3		0	512,100	489,127		91	2,932,919
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Industrial Program Total						**0**	**56**	**-3**		**0**	**512,100**	**489,127**		**91**	**2,932,919**
Home Assistance Program															
Home Assistance Program	Homes	0	7	73		0	1	12		0	11,875	101,327		14	235,779
Home Assistance Program Total						**0**	**1**	**12**		**0**	**11,875**	**101,327**		**14**	**235,779**
Aboriginal Program															
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						**0**	**0**	**0**		**0**	**0**	**0**		**0**	**0**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	0	0	0		0	0	0		0	0	0		0	0
High Performance New Construction	Projects	1	0	2		4	0	-95		22,681	0	-283,373		-91	-476,024
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total						**4**	**0**	**-95**		**22,681**	**0**	**-283,373**		**-91**	**-476,024**
Other															
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
LDC Pilots	Projects	0	0	0		0	0	0		0	0	0		0	0
Other Total						**0**	**0**	**0**		**0**	**0**	**0**		**0**	**0**
Adjustments to 2011 Verified Results						**-29**				**62,536**				**-36**	**228,697**
Adjustments to 2012 Verified Results							**151**				**1,021,059**			**151**	**3,031,687**
Adjustments to 2013 Verified Results								**158**				**1,486,185**		**196**	**3,417,560**
Total Adjustments to Previous Years' Verified Results						**-29**	**151**	**158**		**62,536**	**1,021,059**	**1,486,185**		**312**	**6,677,945**

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

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above is presented in the implementation year. Adjustements in Table 1 reflect persisted savings in the year in which that adjustment is verified.

Table 4: Summarized Program Results

#	Initiative	Activity Unit	Uptake/ Participation Units			
Consumer Programs			**2011**	**2012**	**2013**	**2014**
1	Appliance Retirement	Appliances	400	137	101	97
2	Appliance Exchange	Appliances	97	84	50	74
3	HVAC Incentives	Equipment	2,054	1,403	1,880	1,930
4	Conservation Instant Coupon Booklet	Items	7,928	480	5,408	16,102
5	Bi-Annual Retailer Event	Items	14,799	16,489	14,684	74,988
6	Retailer Co-op	Items	0	0	0	0
7	Residential Demand Response (switch / Programmable Thermostat)	Devices	621	0	3,959	5,769
8	Residential Demand Response (IHD)	Devices	0	0	3,693	5,352
9	New Construction Program	Homes	0	0	0	0
Business Programs						
10	Efficiency: Equipment Replacement – Retrofit	Projects	40	102	183	250
11	Direct Installed Lighting	Projects	552	83	61	349
12	Existing Building Commissioning Incentive	Buildings	0	0	0	0
13	New Construction and Major Renovation Incentive	Buildings	0	1	1	2
14	Energy Audit	Audits	2	8	5	3
15	Commercial Demand Response (part of the Residential program schedule)	Devices	33	0	44	79
16	Commercial Demand Response (IHD)	Devices	0	0	26	55
17	Demand Response 3 (part of the Industrial program schedule)	Facilities	3	3	3	3
Industrial Programs						
18	Process & System Upgrades	Projects	0	0	0	0
19	Monitoring & Targeting	Projects	0	0	0	0
20	Energy Manager	Managers	0	1	7	16
21	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	8	0	0	0
22	Demand Response 3	Facilities	1	4	7	6

Home Assistance Program						
23	Home Assistance Program	Homes	0	836	1,528	963
Pre-2011 Programs						
24	Electricity Retrofit Incentive Program	Projects	39	0	0	0
25	High Performance New Construction	Projects	2	1	3	0
26	Toronto Comprehensive	Projects	n/a	n/a	n/a	n/a
27	Multifamily Energy Efficiency Rebates	Projects	n/a	n/a	n/a	n/a
28	Data Centre Incentive Program	Projects	n/a	n/a	n/a	n/a
29	EnWin Green Suites	Projects	3	0	0	0

Table 5: 2014 Verified Results

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Programs											
1	Appliance Retirement	n/a	n/a	14	89,424	42%	44%	7	41,989	43	953,020
2	Appliance Exchange	100%	100%	29	51,942	53%	53%	15	27,339	41	171,216
3	HVAC Incentives	100%	100%	729	1,328,597	51%	51%	348	632,129	1,689	8,446,973
4	Conservation Instant Coupon Booklet	100%	100%	19	254,133	171%	175%	33	438,729	63	1,913,655
5	Bi-Annual Retailer Event	100%	100%	72	1,091,913	174%	175%	125	1,910,187	193	5,519,949
6	Retailer Co-op	-	-	0	0	-	-	0	0	0	0
7	Residential Demand Response*	-	-	2,113	0	-	-	2,113	0	2,113	1,621
8	Residential New Construction	-	-	0	0	-	-	0	0	0	0
Business Programs											
9	Efficiency: Equipment Replacement	86%	97%	2,307	14,284,985	72%	72%	1,615	10,042,616	6,506	89,585,572
10	Direct Install Lighting	78%	83%	309	1,106,470	94%	94%	292	1,044,364	769	8,171,638
11	Existing Building Commissioning Incentive	-	-	0	0	-	-	0	0	0	0
12	New Construction and Major Renovation Incentive	57%	80%	62	174,227	54%	54%	33	94,083	40	166,315
13	Energy Audit	96%	100%	59	291,834	68%	67%	40	195,821	110	1,057,972
14	Commercial Demand Response (part of the Residential program schedule)	-	-	43	0	-	-	43	0	43	22
15	Demand Response 3* (part of the Industrial program schedule)	-	-	170	0	-	-	170	0	170	15,801

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Industrial Programs											
16	Process & System Upgrades	-	-	0	0	-	-	0	0	0	0
17	Monitoring & Targeting	-	-	0	0	-	-	0	0	0	0
18	Energy Manager	91%	96%	366	5,404,704	90%	90%	329	4,864,234	435	7,668,231
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	0	0	-	-	0	0	62	1,658,058
20	Demand Response 3*	-	-	2,578	0	-	-	2,578	0	2,578	116,773
Home Assistance Program											
21	Home Assistance Program	117%	77%	104	836,798	100%	100%	104	836,798	366	6,897,013
22	Electricity Retrofit Incentive Program	-	-	0	0	-	-	0	0	361	9,844,311
23	High Performance New Construction	100%	100%	0	0	50%	50%	0	0	227	1,697,996
24	Toronto Comprehensive	-	-	0	0	-	-	0	0	0	0
25	Multifamily Energy Efficiency Rebates	-	-	0	0	-	-	0	0	0	0
26	Data Centre Incentive Program	-	-	0	0	-	-	0	0	0	0
27	LDC Custom Programs	-	-	0	0	-	-	0	0	317	3,336,527
28	Time of Use Savings	-	-	1,105	0	-	-	1,105	0	1,105	-
29	Adjustments to previous year's verified results	-	-	470	3,590,078	-	-	270	2,552,652	311	6,677,944

Table 6: Summarized 2014 Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	2.976	2.816	2.641	3.050	4.141	17.006
Business Program Total	2.950	15.858	2.193	11.377	7.638	98.997
Industrial Program Total	2.944	5.405	2.908	4.864	3.075	9.443
Home Assistance Program Total	.104	.837	.104	.837	.366	6.897
Pre-2011 Programs completed in 2011 Total	0	0	0	0	.905	14.879
Time-of-Use Savings	1.105	0	1.105	0	1.105	0
Other Adjustments to Previous Year's Verified Results	.470	3.590	.270	2.553	.312	6.678
Total IESO Contracted Province-Wide CDM Programs	**10.549**	**28.505**	**9.220**	**22.681**	**17.541**	**153.901**

4.2 Evaluation, Measurement and Verification ("EM&V") Findings

The following table provides a summary of the 2014 EM&V findings for the evaluated saveONenergy program initiatives. These key evaluation findings are derived from the 2014 evaluations of the saveONenergy programs and issued by the IESO.

Table 7: Evaluation Findings

#	Initiative	IESO Province-Wide Key Evaluation Findings
Consumer Programs		
1	Appliance Retirement	• Participation increased slightly to 22,563 (7.7%) in 2014 compared with 20,952 in 2013. • Since 2011 overall Initiative participation has decreased nearly 60%. • The greatest decrease was seen in the number of refrigerators collected year-over-year • Of appliances collected, refrigerators and freezers remain the most dominate measures accounting for 90%. However, window AC units and dehumidifiers saw a marked increase of 29.6% and 27% respectively in 2014. • Net to gross ratio (NTG) increased slightly to 47% compared to 43% as reported for 2013 and 2012 program years.
2	Appliance Exchange	• Participation in 2014 increased by 6.5% to 5,685 appliances from 5,337 compared to 2013 • Per-unit savings has increased by 36.6% as ENERGY STAR criteria increases and more participants purchase ENERGY STAR replacements appliances. This resulted in a 6.5% increase in Net Energy & Demand savings. • Net to Gross ratio (NTG) remained unchanged from 2013 at 52.6%
3	HVAC Incentives	• In 2014 net savings increased by 20% from 2013 and overall participation increased by 17% to 113,002 compared to 2013 • The ECM measure has remained the dominant source of savings since 2011 • Per unit furnace savings increased 12.7% due to a shift in the number of participants who use their furnace fan continuously both before and after the retrofit. • Per unit energy and demand savings assumptions for central air conditioners decreased by 56% due to reduced run hours • Net to Gross ratio (NTG) remained unchanged from 2013 at 48%

#	Initiative	IESO Province-Wide Key Evaluation Findings
4	Conservation Instant Coupon Booklet	• Customers redeemed more than five times as many annual coupons in 2014 as in 2013. In total, approximately 500, 000 Annual Coupons were redeemed in 2014 with 110,000 being LDC Coded Coupons. • There was a further reduction in savings for lighting measures from changes in the baseline due to the phase out of 72W and 100W incandescent bulbs. • Despite the significant per unit savings reductions for lighting measure, the Net Annual Savings from Annual Coupons in 2014 was more than six times that in 2013. This is primarily because of higher participation and the inclusion of LED coupons and full year availability of all coupons. • Measured NTG ratios grew significantly in 2014. The NTG ratio is 53% higher in 2014 than in 2013 due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative measures and general energy efficient measures without the use of a coupon but influenced by the coupon program.
5	Bi-Annual Retailer Event	• Over 2.5 million coupons were redeemed in 2014 compared with 2013 redemptions • The Bi-Annual Coupon Event saw a substantial increase in the number of coupons redeemed during the Spring and Fall Events in 2014 compared to 2013. The increase can be linked to a substantial increase in LED purchases with event coupons accounting for 84% of all Bi-Annual Coupons redeemed. • Reductions in per unit savings were overshadowed by the increase in coupon redemptions. Overall savings increased by approximately 85% in 2014 compared with 2013 Demand and Energy Savings. • Similar to the Annual Coupon Event measured NTG ratios rose by 53% compared to 2013 NTG ratios. The rise is due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative and general energy efficient measures without the use of a coupon but influenced by the Bi-Annual Coupon event.

#	Initiative	IESO Province-Wide Key Evaluation Findings
6	Residential Demand Response- PeaksaverPLUS	• There were an additional 55,000 CAC load control devices enrolled in the program in 2014 relative to 2013, which increased the capacity of the residential segment of the program from 129 MW in 2013 to 143 MW in 2014. • Ex-ante impacts on a per device basis were lower than 2013 average. • There were no energy savings in 2014 because there were no system-wide events were called. • Load impact estimates for the average small and medium business and for electric water heaters among residential customers remain consistent with prior year's analysis • IHD's yielded no statistically significant energy savings.
7	Residential New Construction	• The most significant growth in the initiative has been participation in the prescriptive track. MW savings in the prescriptive track increased from zero summer peak MW savings in 2011 to 352 summer peak kW savings in 2014. • The custom track saw participation for the first time in 2014. One custom project of 55 homes contributed 37 kW demand savings and 0.5 GWh of energy savings. • New deemed savings for performance track homes were developed and implemented, resulting more consistent realization rates for 2014. • ENERGY STAR New Homes was introduced as an eligible measure within the performance track in 2014. As a result, these ENERGY STAR New Homes provided 1% of peak kW savings and 4% of kWh savings.
Business Programs		

#	Initiative	IESO Province-Wide Key Evaluation Findings
8	Efficiency: Equipment Replacement	• The number of prescriptive projects increased slightly (1.2%) in 2014 to a total of 4,812. However, total net verified savings and peak demand savings dropped significantly (19% and 30% respectively). This is due to a 19% drop in per-project net verified savings, which can be attributed to lower track level realization rate and net-to-gross ratio and is related to smaller average project sizes. • The quantity of engineered projects increased 22% to a total of 3,906 in 2014, combined with a net verified savings per project increase of 17% the track saw a dramatic 47% increase in net energy savings. • Lower demand realization rates across the program as a whole were tied to equipment differences between reported and calculated values. For lighting projects the difference was most often seen in baseline and retrofit lamp wattages and ballast factors. Non-lighting tracks exhibited lower demand realization rates due to the following factors: • Variations in load profiles where the evaluation team found equipment that operated fewer hours or at a lower capacity than expected from the project documentation. • Inconsistencies in equipment nameplate data (typically efficiency or capacity) between project documentation and equipment installed on-site. • Weather dependent control systems leading to shifts in how often the equipment operated.

#	Initiative	IESO Province-Wide Key Evaluation Findings
9	Direct Install Lighting-Small Business Lighting	• 23,784 projects were completed in 2014 (34% increase from 2013) • The category of 'Other' business type projects increased 71% when compared to 2013. Agribusinesses make up 74% of the 'Other' business type category. While growth in the number of projects is good, agribusinesses projects, in particular, have a realization rate of only 58.5%. This is primarily due to the verified annual operating hours being approximately 45% less than the assumed annual operating hours. • In 2014 LED measures provide the most net savings of any other SBL measure making up 59% of net energy savings in 2014. Their long effective useful life and retention of a larger amount of savings after the baseline adjustment allow LED measures to also contribute substantially more lifetime savings than CFLs and linear fluorescents. • Overall energy and demand realization rates decreased by 1.8 and 3.1 %, respectively, from 2013. o Sampled rural projects have lower energy realization rather than urban projects (63.8% compared to 83.5%) across the 2011 – 2014 sample o Sampled rural projects have even lower demand realization rather than urban projects (49.7% compared to 74.1%) across the 2011 – 2014 sample • The annual proportion of net energy savings from rural projects has increased from 30% in 2011 to 41% in 2014
10	Audit Funding	• The number of audits carried out in 2014 decreased by 20% when compared to 2013. • The average per audit net energy savings attributable to the Audit Funding Initiative was estimated to be 65 MWh and 13 kW of summer peak demands savings. • Time series analysis quantified additional savings from measures implemented after initial program year. It was found that an additional 7.2%, 5.0% and 0.1% can be added to all previously reported projects in 2011, 2012 and 2013 projects, respectively.
11	Existing Building Commissioning Incentive	• 5 projects completed the Hand-off stage in 2014. • Energy realization rate was estimated at 116% and demand realization rate at 202%. • About 31 participants are still in the scoping stage or implementation stage.

#	Initiative	IESO Province-Wide Key Evaluation Findings
12	New Construction and Major Renovation Incentive High Performance New Construction	• Savings have increased every year of the initiative with an increased participation of 50% from 2013 • In 2014, most savings came from the custom track providing 71% of demand savings. • Participation from HVAC measures occurred for the first time in 2014 (providing 14% of summer peak kW savings and 5% of kWh savings). • The measures with the greatest impact on low realization rates for prescriptive measures were high volume low speed (HVLS) fans and variable frequency drives (VFDs). • Province-wide realization rates declined slightly for 2014, as a result of the wider variety of measures being implemented. • Key drivers for participation are: initial project cost, followed by electricity costs and expected energy savings are the key drivers to participation.
Industrial Programs		

13	Process & System Upgrades – Capital Incentives Initiative	• 10 PSUI Capital Incentive projects implemented in 2014, compared to 5 in2013.
		  ○ 4 projects are Behind the Meter Generation (BMG) projects.
		  ○ The remaining projects were energy efficiency improvements in pumping, cooling, compressed air systems and industrial processes.
		• Each project received its own Net to Gross (NTG) value. NTG ratios ranged from 62% to 100% for the 10 projects
		• Realization rates remained high in 2014, ranging from 90 to over 100%.

14	Process and Systems Energy Managers Initiative – Non incented savings	• 379 Energy Manager projects were completed in 2014 compared to 306 in 2013 • Energy Managers are important drivers of non incented savings projects. • In 2014, the Energy Mangers initiative has contributed to 35% of energy savings for Industrial Programs.

#	Initiative	IESO Province-Wide Key Evaluation Findings
15	Process and Systems Monitoring and Targeting Initiative – Non incented savings	• 5 projects were completed in 2014, compared to 3 in 2013. • Low realization rates (36% for energy savings and 59% for demand savings) are attributed to reported savings based on total potential savings rather than non-incentivized realized savings, while the verified savings only include non-incentivized savings).
16	Demand Response 3	• The largest 25 contributors account for 60% of the contractual demand reduction – that is, less than 4% of contributors account for the majority of the load reductions. • A multi-year analysis indicates 2012 was the best year for program performance. After 2012, a single large contributor left the program, resulting in a decrease in overall performance in 2013 and 2014. This highlights the risk having a highly concentrated program with a few large contributors representing a large share of the program capacity. • There were no events called in 2014 and the contracted capacity was similar to 2013.
Home Assistance Program		
17	Home Assistance Program	• Participation decreased by 5 % to 25,424 participants compared with 2013 (26,756). The decrease was due to six LDCs not participating in the Home Assistance Program in 2014. • Realization rates for demand doubled in 2014 to 56% compared with 2013 (26%). However, energy realization rates decreased by 10% to 77% compared with 2013 results. • Realization rate for demand savings increased due to the adoption of the new FAST Tool which incorporated updated kW savings for weatherization measures in particular insulation measures.

Note:

The Key Evaluation findings are derived from the 2014 evaluations of the saveONenergy programs. These findings were developed by 3rd party evaluation contractors. Complete findings are detailed in the contractors' full evaluation reports, which will be available publicly in Q4 2015.

4.3 Spending

Table 8 and Table 9 summarize the total spending by initiative that ENWIN has incurred in 2014 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 8: 2014 Spending

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	51,170	-	-	-	51,170
Appliance Exchange	51,170	-	-	-	51,170
HVAC Incentives	65,425	-	-	-	65,425
Conservation Instant Coupon Booklet	63,097	-	-	-	63,097
Bi-Annual Retailer Event	75,681	-	-	-	75,681
Retailer Co-op		-	-	-	-
Residential Demand Response	228,282	571,210	-	-	799,492
New Construction Program	-	-	-	-	-
Business Program					
Efficiency: Equipment Replacement	458,151	-	1,204,908	-	1,663,059
Direct Installed Lighting	139,266	75,625	373,513	-	588,404
Existing Building Commissioning Incentive	-	-	-	-	-
New Construction and Major Renovation Initiative	113,698	-	52,228	-	165,926
Energy Audit	113,983	-	-	-	113,983
Small Commercial DR (part of the Residential program schedule)	-	-	-	-	-
Demand Response 3 (part of the Industrial program schedule)	-	-	-	-	-
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	14,716	-	97,788	-	112,504
b) detailed engineering study	14,715	-	165,000	-	179,715
c) program incentive	11,786	-	-	-	11,786
Monitoring & Targeting	11,786	-	-	-	11,786
Energy Manager	-	-	-	148,301	148,301
Key Account Manager	-	-	-	149,246	149,246
Efficiency Equipment Replacement Incentive (part of the C&I program schedule)	-	-	-	-	-
Demand Response 3	9,618	-	-	-	9,618
Home Assistance Program					
Home Assistance Program	293,869	1,100	856,199	-	1,151,168
TOTAL SPENDING	1,716,413	647,935	2,749,636	297,547	5,411,531

Table 9: Cumulative Spending (2011-2014)

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	188,992	-	-	-	188,992
Appliance Exchange	171,888	-	-	-	171,888
HVAC Incentives	210,174	-	-	-	210,174
Annual Coupons	203,686	-	-	-	203,686
Bi-Annual Retailer Event	245,893	-	-	-	245,893
Retailer Co-op	-	-	-	-	-
Residential Demand Response	516,942	1,782,915	-	-	2,299,857
New Construction Program	-	-	-	-	-
Business Program					
Equipment Replacement	1,143,677	-	4,585,383	-	5,729,060
Direct Installed Lighting	428,668	267,850	1,023,733	-	1,720,251
Existing Building Commissioning Incentive	-	-	-	-	-
New Construction and Major Renovation Initiative	285,726	-	59,022	-	344,748
Energy Audit	414,332	-	56,085	-	470,417
Small Commercial Demand Response	-	-	-	-	-
Demand Response	-	-	-	-	-
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	44,353	-	279,568	-	323,921
b) detailed engineering study	44,988	-	303,864	-	348,852
c) program incentive	20,647	-	-	-	20,647
Monitoring & Targeting	39,549	-	37,500	-	77,049
Energy Manager	-	-	-	411,089	411,089
Key Account Manager ("KAM")	-	-	-	424,752	424,752
Equipment Replacement Incentive	-	-	-	-	-
Demand Response 3	39,365	-	-	-	39,365
Home Assistance Program					
Home Assistance Program	731,673	5,880	1,969,405	-	2,706,958
Sub-total CDM Program Spending	**4,730,553**	**2,056,645**	**8,314,560**	**835,841**	**15,937,599**
Note: The above cumulative spending table includes adjustments to reflect spending for the period 2011-2014 based on true-up exercises for various program initiatives. Please see attached Appendix C for details.					

Table 9: Cumulative Spending (2011-2014)- Continued for Pre-2011 Programs

Pre 2011 Programs					
Electricity Retrofit Incentive Program	-	-	902,954	-	902,954
Residential Demand Response – Peaksaver Extension Period	-	309,740	27,800	-	337,540
EnWin Green Suites	-	-	12,189	-	12,189
Total CDM Program Spending	**4,730,553**	**2,366,385**	**9,257,503**	**835,841**	**17,190,282**
Note: The above cumulative spending table includes adjustments to reflect spending for the period 2011-2014 based on true-up exercises for various program initiatives. Please see attached Appendix C for details. The pre-2011 Program Spending activity reported above exclude an allocation of Program Administration Budget.					

5. Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

Table 10: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by IESO	3.1	2.4	2.4	2.1
2012 – Verified by IESO	0.0	4.0	2.8	2.8
2013 – Verified by IESO	0.0	0.1	8.4	3.4
2014 – Verified by IESO	0.0	0.1	0.2	9.2
Verified Net Annual Peak Demand Savings Persisting in 2014:				**17.5**
ENWIN Utilities Ltd. 2014 Annual CDM Capacity Target:				**26.8**
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				**65.4%**

Table 11: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by IESO	9.0	9.0	9.0	8.2	35.2
2012 – Verified by IESO	0.0	16.9	16.8	16.8	50.6
2013 – Verified by IESO	0.0	0.4	21.4	20.8	42.6
2014 – Verified by IESO	0.0	0.6	2.11	22.7	25.5
Verified Net Cumulative Energy Savings 2011-2014:					**153.9**
ENWIN Utilities Ltd. 2011-2014 Cumulative CDM Energy Target:					**117.9**
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					**130.5%**

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
2013 – Verified		0.1	8.4	3.4
2014 – Verified		0.1	0.2	9.2
Verified Net Annual Peak Demand Savings Persisting in 2014:				17.5
ENWIN Strategy, Milestone submitted for 2014:				29.7*
Variance (MW)				-12.2

* 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	2011-2014
2011 – Verified	9.0	9.0	9.0	8.2	35.2
2012 – Verified		16.9	16.8	16.8	50.6
2013 – Verified		0.4	21.4	20.8	42.6
2014 – Verified		0.6	2.11	22.7	25.5
Verified Net Cumulative Energy Savings 2011 -2014:					153.9
ENWIN Strategy, Milestone submitted for 2013					124.1**
Variance (GWh)					29.8

** 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.

ENWIN's service territory being designated a "Discounted Zone" for purposes of the DR3 program contributed to the variance in reaching forecasted demand savings included in ENWIN's original CDM Strategy for this program.

To address the expected deficiency in reaching the Demand Savings Target, ENWIN focused efforts on CDM initiatives that encourage demand savings. In 2013 & 2014, ENWIN launched and continued to provide 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 also launched an ERII Certified Applicant Representative ("CAR") Program in 2014, to incent channel partners to drive additional take-up in the Equipment Replacement Incentive Initiative (ERII) as a means to achieve further demand savings towards targets.

As ENWIN anticipated, these efforts in itself would not fully overcome the forecasted peak demand savings shortfall. Factors that have hindered ENWIN's ability to reach its demand savings target are summarized below:

- The established target level is too high; it required adjustment to reflect the current reality within ENWIN's service territory (experienced a reduction in load 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. This was later addressed with the Minister of Energy's March 31, 2014 announcement of a new 6-year Conservation Framework.
- Need for a more effective and streamlined change management process.
- Initial understanding of the impacts of the EM&V process on achieved savings was not adequately communicated and in some cases changed midstream.
- Complex approval process and onerous contracts resulted in delays and/or cancellations of behind the meter ("BTM") generation projects which could have delivered significant demand level reductions.

On an innovative front, ENWIN undertook a pilot project within the OPA's Conservation Fund initiative relating to incorporating Water Conservation Measures with the active Home Assistance Program offering. These water savings will equate to electrical savings in upstream water treatment/production.

On March 31st, 2014 the Minister of Energy issued a directive entitled "Continuance of the OPA's Demand Response Program under IESO management" which effectively halts new customer enrollments in the DR3 program until the IESO has a program in market. This is estimated to be some time in 2015.

5.3 Outlook to 2015-2020

Looking forward to the new CDM Framework, ENWIN anticipates a challenging and exciting time ahead with a learning curve relating to the administering of cost effective programs for the achievement of an aggressive energy savings target within a modest budget. ENWIN is hopeful that ENWIN's reliance on proposed Combined Heat & Power ("CHP") projects included within our CDM Plan come to fruition and that the amendments to the current Energy Manager Initiative continue to add value in identifying and realizing energy savings. Also, ENWIN anticipates the introduction of new Province-wide Residential Programs within the term of the new Framework to address the limited number and variety of programs for this customer sector.

6 Conclusion

Over the course of 2014, ENWIN has achieved an incremental 9.2 MW in peak demand savings and 22.7 GWh in energy savings, which represents 34.3% and 19.3% of ENWIN's 2014 target, respectively.

The overall results achieved in 2011-2014 are 17.5 MW in peak demand savings and 153.9 GWh in energy savings, which represents 65.4% and 130.5% of ENWIN's 2014 target, respectively. These results are representative of 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 future CDM programs.

Future reports on Conservation First will be provided by LDCs to the IESO who will report annually to the OEB.

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: IESO 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. Available on IESO's extranet;
- 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. Window ACs were discontinued from the program in 2013.

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- 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: IESO 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. Available on IESO's extranet;
- 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 Flourescent 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 IESO 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 IESO enters into agreements with retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

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 IESO for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the IESO. The IESO 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 IESO air coverage driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;

- 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 ***peaksaver*** PLUS® 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. Available on IESO's extranet;
- 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. Available on IESO's extranet;
- 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 $1,500 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 $1,500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial $1,500 limit.

Target End Uses: 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. Available on IESO's extranet;
- 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. Available on IESO's extranet;
- 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. Available on IESO's extranet;

- 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. Available on IESO's extranet;
- 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 cost

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. Available on IESO's extranet;
- 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 ("M&T") 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 M&T 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. Available on IESO's extranet;
- 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. Available on IESO's extranet;
- 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. Available on IESO's extranet.

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 IESO. The IESO administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). IESO 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. Available on IESO's extranet;
- 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.

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., CFL bulbs)

Delivery: LDC delivered.

Additional detail is available:

- Schedule E. Available on IESO's extranet.

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 IESO (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.

Appendix C – 2011-2014 Cumulative Spending True-up Adjustments

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Residential Demand Response*	-	1,211,705	-	-	1,211,705
Business Program					
Equipment Replacement	6	-	49,641	-	49,647
Energy Audit	120,686	-	-	-	120,686
Demand Response	(120,686)	-	-	-	(120,686)
Industrial Program					
a) preliminary engineering study	-	-	(19,000)	-	(19,000)
b) detailed engineering study	-	-	43,980	-	43,980
Energy Manager	(16,124)	-	-	6,288	(9,836)
Key Account Manager ("KAM")	(144,021)	-	-	12,201	(131,820)
Efficiency: Equipment Replacement	-	-	(49,641)	-	(49,641)
Home Assistance Program					
Home Assistance Program	-	(450)	100	-	(350)
Sub-total 2011-2014 Cumulative Spending	(160,139)	1,211,255	25,080	18,489	1,094,685
Pre 2011 Programs**					
Electricity Retrofit Incentive Program	-	-	-	-	-
Residential Demand Response – Peaksaver Extension Period	-	8,406	(10,600)	-	(2,194)
EnWin Green Suites	-	-	-	-	-
Total CDM Program Spending Adjustments	(160,139)	1,219,661	14,480	18,489	1,092,491

*Note: This value reflects the PBF spending activity for 2013.

**Note: The Pre-2011 Program Spending Adjustments exclude an allocation for Program Administration Budget (PAB) Expense.