

# 2016 Annual Verified Local Distribution Company Conservation & Demand Management Program Results Report

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# Executive Summary

In 2016, the Independent Electricity System Operator (IESO) and the local distribution companies (LDCs) continued the delivery of conservation and demand management (CDM) programs, achieving more than 1 terawatt-hour (TWh) of net annual energy savings for the third consecutive year. At the same time, the IESO and LDCs fully transitioned to the 2015-2020 Conservation First Framework (CFF), closed off the 2011-2014 + 2015 Extension Legacy Framework, introduced a broad array of local and pilot CDM programs, executed an updated version 2 of an Energy Conservation Agreement, finalized the 2016 Achievable Potential Study and relaunched the Save on Energy brand.

The CFF achieved 1.2 TWh of net verified incremental energy savings in 2016, of which 1.1 TWh are expected to persist until at least 2020. Together with adjustments to 2015 verified results, 38 percent of the CFF target has been achieved by the end of 2016, setting a strong foundation to achieve or surpass the target in 2020.

The following are some key highlights and insights from the 2016 CDM program evaluation, measurement and verification (EM&V) process, which involved assessing the resource savings, cost-effectiveness and market impacts of each program. Detailed EM&V reports are available on the IESO website.

- The Save on Energy Retrofit Program, an initiative that targets commercial and light industrial customers, remained the dominant source of savings in 2016. In total, the program delivered 567 GWh of electricity savings, representing more than 49 percent of total portfolio savings, primarily through the completion of lighting retrofit projects (72% of program savings).
- The 2016 program year saw the greatest savings achievement ever for the consumer focused Save on Energy Coupon Program, achieving 428 gigawatt-hours (GWh) of electricity savings, largely due to the redemption of coupons for LED lighting measures.
- The consumer focused Save on Energy Heating & Cooling Program was the third-best performing program in 2016 having achieved 76 GWh of electricity savings.
- With the exception of the Save on Energy Retrofit Program, all programs delivered to the commercial sector in 2016 regressed in performance, with an average drop of 75 percent in savings. The drop in savings is due to a combination factors including: long project lead times from the start of the current framework, program redesigns, project ramp-up periods and increased project reporting lead times.
- Long project lead times and post project measurement & verification processes in the industrial focused Save on Energy Process and Systems Upgrades program resulted in only four projects being verified in 2016, resulting 12 GWh of verified energy savings. Several projects completed in 2016 are still undergoing post project data collection and reporting. The impacts of these projects will be verified in a future year's evaluation and reported as 2016 adjustment results in future results reports. Only savings verified through the IESO's formal EM&V process are demonstrated within this report.
- LDCs launched 12 LDC Local Programs and 20 LDC Innovation Fund Pilot Programs since the beginning of the framework. Two Local Programs and ten Pilot Programs were in market for a sufficient period of time and achieved sufficient participation to have undergone the EM&V process achieving 2 and 15 GWh of verified savings, respectively. All other local and pilot programs achieving sufficient participation and savings will be evaluated in a future year's evaluation. Only savings verified through the IESO's formal EM&V process are demonstrated within this report.

For program descriptions, please see the 2015 Annual Verified LDC CDM Program Results Report as well as the Save on Energy website at [saveonenergy.ca](http://saveonenergy.ca). Endnotes with hyperlinks are available throughout the document.

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# Background

The Independent Electricity System Operator (IESO) was established through the amalgamation of the predecessor IESO with the Ontario Power Authority (OPA) effective January 1, 2015, for the purpose, among others, of engaging in activities that promote electricity conservation and the efficient use of electricity. It is licensed by the Ontario Energy Board (OEB) under Part V of the *Ontario Energy Board Act, 1998 (Act)*.

On March 26, 2014, the Minister of Energy, under the guidance of sections 27.1 and 27.2 of the Act, directed the OEB to amend the licence of each LDC to add a condition that specifies the LDC shall, between January 1, 2015, and December 31, 2020, make conservation and demand management (CDM) programs that achieve reductions in electricity consumption available to customers in its licensed service area (the “CDM Requirement”).

The Minister of Energy issued a directive to the OPA dated March 31, 2014<sup>1, 2</sup>, as amended by a subsequent directive dated October 23, 2014, regarding the 2015-2020 Conservation First Framework<sup>3</sup> (CFF). This directive required the OPA to coordinate, support and fund the delivery of CDM programs through LDCs between January 1, 2015 and December 31, 2020 and to achieve a total of 7 TWh of annual reductions in electricity consumption by 2020 in accordance with the principles and requirements set out in the directive.

Each LDC will be required to meet its CDM Requirement by:

- 1) making a core set of province-wide CDM programs, funded by the IESO, available to customers in their licensed service area;
- 2) making local and/or regional CDM programs, funded by the IESO, available to customers in their licensed service area; or
- 3) a combination of 1 and 2.

The IESO entered into an Energy Conservation Agreement with LDCs between October 31, 2014, and December 31, 2014, and subsequently amended and restated the agreement between May 1, 2016, and July 1, 2017, to achieve the LDCs’ CDM Requirements.

Accordingly, CDM programs delivered in 2015 under the 2011-2014 + 2015 extension Legacy Framework were funded through that framework’s funding mechanisms; however, the respective CDM results are attributed towards the LDCs’ 2020 CFF targets. LDCs had the option to launch CFF CDM programs up to January 1, 2016, and thus may not have had any CFF CDM program results in 2015.

This report covers the first two years of the six-year 2015-2020 Conservation First Framework (the period from January 1, 2015 to December 31, 2016). Specifically, this report includes all energy savings achieved by and spending on programs that contributed toward meeting the CFF targets, including: 1) the Conservation First Framework LDC CDM Plan Budget; 2) the Legacy Framework; 3) the Conservation Fund; and 4) the IESO Central Services Budget including the LDC Innovation Fund.

# 1 - Overall 2015-2020 CFF LDC CDM Program Results

## 1.1 - INTRODUCTION

The CFF assigns each LDC connected to Ontario's electricity system a CDM program energy savings target and associated CDM program funding budget, which they are responsible for managing. The CFF began January 1, 2015 and runs through December 31, 2020. LDCs have six years to implement CDM programs to achieve energy savings that persist to the year 2020, consistent with the CFF LDC CDM Plan 2020 Annual Energy Savings Target.

The 2016 program year was the second year in the 2015-2020 Conservation First Framework. In 2016, all LDCs in Ontario were delivering the Conservation First Framework, as 2015 was a transition year from the legacy 2011-2014 + 2015 Extension Green Energy Act Framework. LDCs were allowed to continue to deliver programs offered through that framework, with savings results credited towards CFF targets. Despite all LDCs launching their CFF programs, not all LDCs have yet reported to the IESO savings results or spending as will be seen later in this report. Savings and spending are expected from all LDCs by the end of 2017.

The 2015-2020 CFF Budget has several components. A budget of \$1.835 billion has been allocated to LDCs for all program delivery expenses, such as customer financial incentives and CDM Program administrative expenses. The budget was established by the IESO with input from stakeholders and based on the 7 TWh energy savings target and established minimum cost effectiveness thresholds. A description of the LDC target and budget establishment methodology employed can be found in the LDC Toolkit available on the IESO website<sup>4</sup>. LDCs are responsible for the management of their allocated budget and each LDC's spending is tracked by the IESO against its CDM Plan. A separate budget of \$400 million has been allocated to IESO Central Services, which include the LDC Collaboration Fund, LDC Innovation Fund and LDC Performance Incentives<sup>4</sup>. IESO Central Services includes expenses such as: 1) CDM program evaluation, 2) marketing, 3) market research, 4) program delivery, 5) national accounts, 6) capability building initiatives, 7) energy manager initiatives, 8) program infrastructure, and 9) technical support.

The IESO LDC Collaboration Fund supports and encourages collaboration efforts related to program design and delivery among LDCs and province-wide working groups<sup>4</sup>. The IESO LDC Innovation Fund supports LDC-led program design and market testing of new small-scale pilot programs<sup>4</sup>. Testing and learning from such pilots contribute to the success and cost-effectiveness of the potential full-scale launch of a new program. Pilot programs funded through the IESO Conservation Fund that have achieved electric energy and demand savings in identified LDC service territories and have undergone the IESO's Evaluation, Measurement and Verification (EM&V) process have also been included as contributors to LDC's CFF 2020 Annual Energy Savings Target<sup>5</sup>.

All CDM programs must be subjected to a formal evaluation consistent with the IESO's EM&V Protocols and Requirements, available on the IESO's website<sup>4</sup>, in order to be counted towards the CFF 2020 Annual Energy Saving Target<sup>6</sup>. Final EM&V reports that include process and impact

EM&V results are produced annually for each program sector (i.e., consumer, commercial and industrial) by independent third party EM&V assessors<sup>7</sup>.

This 2016 Annual Verified Local Distribution Company Conservation & Demand Management Program Results Report only includes IESO-funded CDM results attributable to meeting the CFF 2020 Annual Energy Savings Target. Not included in this report are other CDM initiatives in Ontario, such as the IESO's Industrial Accelerator Program, Industrial Conservation Initiative, *peaksaver PLUS*<sup>®</sup> program, Capacity Based Demand Response Program, Demand Response Auction or pilot programs, electricity savings from other influencers such as natural gas distributor demand-side management programs or federal government CDM programs, or codes and standards as savings resulting from these programs are not eligible to contribute towards CFF LDC CDM targets, nor are they funded from CFF LDC CDM Budgets. For additional context in terms of historical results, interim quarterly results or more detailed annual verified results, additional reports are available on the IESO and OEB websites<sup>8, 9, 10, 11</sup>.

## **1.2 - PROGRESS TOWARDS ACHIEVING 2015-2020 CFF LDC CDM PLAN TARGET**

Progress towards the CFF Energy Savings Target is based on net verified energy savings in the year 2020 achieved as a result of CDM program implementation from 2015 to 2020. The following table demonstrates how each year's CDM program net verified energy savings results persist and contribute to the 2020 target and the current progress towards the target. Savings persistence identifies the amount of energy savings that are expected to be realized in each year after an energy efficiency upgrade has been implemented and recognizes that energy savings do not last forever or maintain 100% of initial savings in each year after implementation. The 2015 adjustment line item represents savings resulting from projects completed in 2015 that were not reported to the IESO in time for the 2015 program year verification completed July 1, 2016. Instead, they were reported to the IESO in time for the 2016 program year verification completed July 1, 2017. It is expected that each year of the CFF will see adjustments for each previous year of the CFF due to late reporting.

**Table 1: Net Verified Annual Energy Savings at the End-User Level<sup>i</sup>**

#	Implementation Year	Net Verified Annual Energy Savings at the End-User Level (GWh)					
		2015	2016	2017	2018	2019	2020
1	2015	1,231	1,183	1,162	1,160	1,131	1,117
2	2015 Adjustment	350	349	347	347	373 <sup>ii</sup>	373
3	2016		1,172	1,159	1,157	1,156	1,154
4	2017						
5	2018						
6	2019						
7	2020						
<b>Total</b>		<b>1,582</b>	<b>2,705</b>	<b>2,668</b>	<b>2,664</b>	<b>2,660</b>	<b>2,644</b>
<b>Net Verified 2020 Annual Energy Savings (GWh):</b>							<b>2,644</b>
<b>CFF LDC CDM Plan Target (GWh):</b>							<b>7,000</b>
<b>Portion of CFF LDC CDM Plan Target Achieved (%):</b>							<b>38</b>

### 1.3 - SPENDING TOWARDS SPENDING 2015-2020 CFF LDC CDM PLAN BUDGET

The CFF LDC CDM Plan Budget is fixed at \$1.835 billion over the 2015-2020 period. The following table provides the spending for each year and the corresponding progress towards the spending of the budget. The 2015 adjustment represents the adjustment of costs associated with the 2015 program year that were not reported in the 2015 Annual Verified Local Distribution Company Conservation & Demand Management Program Results.

**Table 2: LDC CDM Plan Budget Spending<sup>iii</sup>**

#	Implementation Year	CFF LDC CDM Plan Budget Spending (\$)
1	2015	22,426,565
2	2015 Adjustment	2,361,658
3	2016	205,478,075
4	2017	
5	2018	
6	2019	
7	2020	
<b>Total CFF LDC CDM Plan Budget Spending (\$):</b>		<b>230,266,298</b>
<b>CFF LDC CDM Plan Budget (\$):</b>		<b>1,835,264,933</b>
<b>Portion of CFF LDC CDM Plan Budget Spent (%):</b>		<b>13</b>

<sup>i</sup> Total may not equal addition of summands due to rounding.

<sup>ii</sup> 2015 Adjustment increase in 2019 is a result of an adjustment in the savings persistence of the 2015 Save on Energy Audit Funding Program from 4 years to 14 years, identified in the 2016 evaluation.

<sup>iii</sup> Total may not equal addition of summands due to rounding.

## 1.4 - OVERALL 2015-2016 SPENDING

The 2015 year was a transition year between the 2011-2014 + 2015 Extension Legacy Framework and the 2015-2020 Conservation First Framework in which LDCs had the option of delivering CDM Programs funded by either framework. As 2011-2014 + 2015 Extension Legacy Framework programs ended on December 31, 2015, associated framework spending in 2016 was on wrapping up 2015 completed projects reported to the IESO in 2016. As all LDCs transitioned into the 2015-2020 CFF by January 1, 2016, the majority of program funding transitioned from the Legacy Framework in 2015 to the CFF in 2016. Negative values reflect corrections to previously reported values. The table below describes 2015 and 2016 spending by framework and category. Conservation Fund Pilot Program spending has also been included as some programs contributed to meeting the 2020 Energy Savings Target. Additional details of spending categories can be found in sections 2.5, 2.6, and 2.10.

**Table 3: Overall 2015-2016 Spending<sup>iv</sup>**

#	Cost	2015 Spending (\$)	2015 Spending Adjustment (\$)	2016 Spending (\$)	Total Spending (\$)
<b>2011-2014 + 2015 Extension Legacy Framework</b>					
1	IESO Program Administration Costs	31,884,340	0	5,591,248	37,475,588
2	LDC Program Administration Budget Costs	61,031,868	0	5,421,957	66,453,825
	<b>Total Program Administration Costs</b>	<b>92,916,208</b>	<b>0</b>	<b>11,013,206</b>	<b>103,929,414</b>
3	Participant Incentives	306,898,887	0	84,555,635	391,454,522
	<b>Total 2011-2014 + 2015 Extension Legacy Framework</b>	<b>399,815,095</b>	<b>0</b>	<b>95,568,841</b>	<b>495,383,936</b>
<b>Conservation Fund</b>					
4	IESO Program Costs	6,786,964	0	4,324,220	11,111,184
	<b>Total Conservation Fund</b>	<b>6,786,964</b>	<b>0</b>	<b>4,324,220</b>	<b>11,111,184</b>
<b>2015-2020 Conservation First Framework</b>					
5	LDC CDM Plan Budget				
a	LDC Administrative Expenses	7,287,790	2,398,698	71,894,596	81,581,084
b	IESO Value Added Service Provider Cost	1,640,642	-1,690	3,877,520	5,516,472
	<b>Total Administration Expenses</b>	<b>8,928,432</b>	<b>2,397,008</b>	<b>75,772,116</b>	<b>87,097,556</b>
c	Participant Incentives	13,498,133	-35,350	129,705,958	143,168,741
	<b>Total LDC CDM Plan Budget</b>	<b>22,426,565</b>	<b>2,361,658</b>	<b>205,478,075</b>	<b>230,266,298</b>
6	IESO Central Services	3,064,160	0	27,535,401	30,599,562
	<b>Total 2015-2020 Conservation First Framework</b>	<b>25,490,725</b>	<b>2,361,658</b>	<b>233,013,476</b>	<b>260,865,859</b>
	<b>Total</b>	<b>432,092,784</b>	<b>2,361,658</b>	<b>332,906,536</b>	<b>767,360,978</b>

<sup>iv</sup> Total may not equal addition of summands due to rounding.

## 2 - Detailed 2015-2020 CFF LDC CDM Program Results

### 2.1 - INTRODUCTION

The CDM program results provided in this section are verified results from the 2015 and 2016 program years. 2015 program year results are unchanged from the 2015 Annual Verified CDM Program Results Report. Corrections and/or late additions are presented in the 2015 Adjustment category. Results are first presented at the program level and subsequently at the LDC level.

Results at the program level are structured according to the Program Catalog provided in Section 2.2. Metrics include:

- 1) participation;
- 2) annual energy savings;
- 3) annual peak demand savings, in which 2) and 3) for incremental first year and 2020 annual savings can be determined;
- 4) spending by:
  - a) participant incentive;
  - b) program administration; and
  - c) total spending (sum of 4a and 4b);

A complete account of actual annual program and portfolio level savings and spending vs targets, budgets and forecasts can be found in the comprehensive Final Verified 2016 Annual LDC CDM Program Results Reports in spreadsheet format available on the IESO website<sup>12</sup>. Spending data includes an "Other" line item which represents initiatives under the Legacy Framework or pilot programs under the Conservation Fund that did not directly result in savings that contribute towards the CFF 2020 Annual Energy Savings Target, including:

- 1) demand response initiatives;
- 2) capability building and enabling initiatives
- 3) sector-level:
  - a) marketing; and
  - b) LDC audits;

Results at the LDC level are presented as achievement first towards the LDC's CFF 2015-2020 Allocated Target and Budget and then against their CFF LDC CDM Plan 2015 forecast for energy savings and budget expenditure. Some LDCs demonstrated high achievement as a result of a small number of exceptionally large projects started under the Legacy Framework and completed in 2015. Spending forecasts and results are only with regard to spending against CFF CDM programs.

All savings shown are net and verified at the end-user level. Gross, reported or generator-level savings are not provided. Forecasts for energy savings and budget expenditures are based on each LDC's approved CFF CDM Plan as of April 1, 2017<sup>11</sup>, and additional detailed forecasts and results

by LDC, framework and program can be found in each LDC's Final 2015 and 2016 Verified Results Reports<sup>12</sup>.

## 2.2 - PROGRAM CATALOG

Table 4 is a comprehensive list of programs that are delivered in market, or had forecasted activity in in 2015-2016. Data tables in subsequent sections in this report may not necessarily list all programs in the Program Catalog. For space considerations, programs are omitted if a result is zero. Further details regarding programs can be found on the Internet<sup>13, 14</sup>.

**Table 4: Program Catalog**

#	Program	Description
1	Save on Energy Coupon Program	2015 - 2020 Conservation First Framework - Approved Province Wide Residential Program
2	Save on Energy Heating & Cooling Program	2015 - 2020 Conservation First Framework - Approved Province Wide Residential Program
3	Save on Energy New Construction Program	2015 - 2020 Conservation First Framework - Approved Province Wide Residential Program
4	Save on Energy Home Assistance Program	2015 - 2020 Conservation First Framework - Approved Province Wide Residential Program
5	Save on Energy Audit Funding Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
6	Save on Energy Retrofit Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
7	Save on Energy Small Business Lighting Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
8	Save on Energy High Performance New Construction Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
9	Save on Energy Existing Building Commissioning Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
10	Save on Energy Process & Systems Upgrades Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
11	Save on Energy Energy Manager Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
12	Save on Energy Monitoring & Targeting Program	2015 - 2020 Conservation First Framework - Approved Province Wide Business Program
13	Save on Energy Retrofit Program - P4P	2015 - 2020 Conservation First Framework - Approved Province Wide Pay-for-Performance Program
14	Save on Energy Process & Systems Upgrades Program - P4P	2015 - 2020 Conservation First Framework - Approved Province Wide Pay-for-Performance Program
15	Adaptive Thermostat Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
16	Business Refrigeration Incentives Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
17	Conservation on the Coast Home Assistance Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
18	Conservation on the Coast Small Business Lighting Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
19	First Nations Conservation Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
20	High Efficiency Agricultural Pumping Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
21	Instant Savings Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
22	Opsaver Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
23	PUMPsaver Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
24	Social Benchmarking Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
25	THESL Swimming Pool Efficiency Local Program	2015 - 2020 Conservation First Framework - Approved Local / Regional Program
26	Air Source Heat Pump for Residential Water Heating Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
27	Building Optimization Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
28	Conservation Voltage Regulation Leveraging AMI Data Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
29	Demand Control Kitchen Ventilation Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
30	Direct Install - Hydronic Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
31	Direct Install - RTU Controls Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
32	Electronically Commutated Furnace Motor Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
33	Electronics Takeback Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
34	Home Energy Assessment and Retrofit Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
35	HONI HP Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
36	P4P for Class B Office Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
37	Performance Based Conservation Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
38	Re-Invest Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
39	Residential Direct Install Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
40	Residential Direct Mail Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
41	Residential Ductless Heat Pump Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
42	Residential Install Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
43	Social Benchmarking Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
44	Solar Powered Attic Ventilation Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
45	Truckload Event Pilot Program	2015 - 2020 Conservation First Framework - Approved Pilot Program
46	Save on Energy Retrofit Program Enabled Savings	2015 - 2020 Conservation First Framework - Other
47	Save on Energy High Performance New Construction Program Enabled Savings	2015 - 2020 Conservation First Framework - Other
48	Save on Energy Process & Systems Upgrades Program Enabled Savings	2015 - 2020 Conservation First Framework - Other
49	Proposed Program or Pilot	2015 - 2020 Conservation First Framework - Other
50	Unassigned Target	2015 - 2020 Conservation First Framework - Other
51	EnerNOC Conservation Fund Pilot Program	Conservation Fund Framework - Pilot Program
52	Home Depot Home Appliance Market Uplift Conservation Fund Pilot Program	Conservation Fund Framework - Pilot Program
53	Loblaws P4P Conservation Fund Pilot Program	Conservation Fund Framework - Pilot Program
54	Ontario Clean Water Agency F4P Conservation Fund Pilot Program	Conservation Fund Framework - Pilot Program
55	Social Benchmarking Conservation Fund Pilot Program	Conservation Fund Framework - Pilot Program

#	Program	Description
56	Strategic Energy Group Conservation Fund Pilot Program	Conservation Fund Framework - Pilot Program
57	Appliance Retirement Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
58	Coupon Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
59	Bi-Annual Retailer Event Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
60	HVAC Incentives Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
61	Residential New Construction and Major Renovation Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
62	Energy Audit Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
63	Efficiency: Equipment Replacement Incentive Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
64	Direct Install Lighting and Water Heating Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
65	New Construction and Major Renovation Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
66	Existing Building Commissioning Incentive Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
67	Process and Systems Upgrades Initiatives - Project Incentive Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
68	Process and Systems Upgrades Initiatives - Energy Manager Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
69	Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
70	Low Income Initiative	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Province Wide Program
71	Aboriginal Conservation Program	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Program
72	Program Enabled Savings	2011 - 2014 + 2015 Extension Legacy Green Energy Act Framework - Program

## 2.3 - LDC CDM PROGRAM PARTICIPATION

Table 5 provides the unit of measure and participation for each program in market by verification period. The 2015 column represents 2015 program year results as determined in the 2015 program year EM&V process, the 2016 column represents 2016 results as determined in the 2016 program year EM&V process, and the 2015 Adjustment column represents incremental adjustments to the 2015 program year as determined in the 2016 program year EM&V process, as a result of reporting of activity occurring in 2015 subsequent to the 2015 EM&V Process or the correction of errors or omissions to 2015 verified results.

**Table 5: LDC CDM Program Participation**

#	Program	Unit of Measure	LDC CDM Program Participation (#)			Total
			2015	2015 Adjustment	2016	
1	Save on Energy Coupon Program	Products	1,207,534	198,108	17,053,287	18,458,929
2	Save on Energy Heating & Cooling Program	Equipment	20,235	2,354	136,617	159,206
3	Save on Energy New Construction Program	Homes	0	6	130	136
4	Save on Energy Home Assistance Program	Homes	1,032	226	5,066	6,324
5	Save on Energy Audit Funding Program	Projects	2	27	213	242
6	Save on Energy Retrofit Program	Projects	811	2,495	10,690	13,996
7	Save on Energy Small Business Lighting Program	Projects	0	0	2,421	2,421
8	Save on Energy High Performance New Construction Program	Projects	0	8	180	188
9	Save on Energy Process & Systems Upgrades Program	Projects	0	0	1	1
10	Save on Energy Energy Manager Program	Projects	0	0	69	69
11	Save on Energy Retrofit Program - P4P	Projects	0	61	472	533
12	Save on Energy Process & Systems Upgrades Program - P4P	Projects	0	0	3	3
13	Business Refrigeration Incentives Local Program	Projects	0	0	305	305
14	Building Optimization Pilot Program	Projects	0	0	75	75
15	Direct Install - Hydronic Pilot Program	Projects	0	10	0	10
16	Direct Install - RTU Controls Pilot Program	Projects	0	0	13	13
17	Electronics Takeback Pilot Program	Products	0	0	10,004	10,004
18	HONI HP Pilot Program	Projects	0	0	112	112
19	P4P for Class B Office Pilot Program	Projects	0	0	5	5
20	Residential Direct Install Pilot Program	Homes	0	0	322	322
21	Residential Direct Mail Pilot Program	Homes	0	0	726	726
22	Solar Powered Attic Ventilation Pilot Program	Homes	0	0	1,026	1,026
23	Truckload Event Pilot Program	Products	0	0	226,443	226,443
24	Save on Energy Retrofit Program Enabled Savings	Claims	0	9	28	37
25	Save on Energy Process & Systems Upgrades Program Enabled Savings	Claims	0	0	1	1
26	EnerNOC Conservation Fund Pilot Program	Projects	12	0	0	12
27	Home Depot Home Appliance Market Uplift Conservation Fund Pilot Program	Projects	0	0	4,638	4,638
28	Loblaw P4P Conservation Fund Pilot Program	Projects	18	0	0	18
29	Ontario Clean Water Agency P4P Conservation Fund Pilot Program	Projects	0	0	2	2
30	Social Benchmarking Conservation Fund Pilot Program	Participants	150,258	0	0	150,258
31	Strategic Energy Group Conservation Fund Pilot Program	Projects	10	0	0	10
32	Appliance Retirement Initiative	Appliances	14,733	0	-	14,733
33	Coupon Initiative	Products	2,075,200	413,479	-	2,488,679

#	Program	Unit of Measure	LDC CDM Program Participation (#)			
			2015	2015 Adjustment	2016	Total
34	Bi-Annual Retailer Event Initiative	Products	3,178,024	27,954	-	3,205,978
35	HVAC Incentives Initiative	Equipment	102,154	2,507	-	104,661
36	Residential New Construction and Major Renovation Initiative	Homes	4,012	132	-	4,144
37	Energy Audit Initiative	Projects	356	199	-	555
38	Efficiency: Equipment Replacement Incentive Initiative	Projects	12,547	1,036	-	13,583
39	Direct Install Lighting and Water Heating Initiative	Projects	18,643	0	-	18,643
40	New Construction and Major Renovation Initiative	Projects	168	141	-	309
41	Existing Building Commissioning Incentive Initiative	Projects	11	4	-	15
42	Process and Systems Upgrades Initiatives - Project Incentive Initiative	Projects	12	11	-	23
43	Process and Systems Upgrades Initiatives - Energy Manager Initiative	Projects	424	1	-	425
44	Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiative	Projects	2	0	-	2
45	Low Income Initiative	Homes	15,494	1,012	-	16,506
46	Aboriginal Conservation Program	Homes	1,586	0	-	1,586
47	Program Enabled Savings	Claims	14	0	-	14

## 2.4 - LDC CDM PROGRAM SAVINGS

Table 6 provides annual energy savings persistence by year up to the year 2020 for each program in market in 2015 or 2016 by verification period.

**Table 6: Net Verified Annual Energy Savings at the End-User Level**

#	Program	Verification Period	Net Verified Annual Energy Savings at the End-User Level (kWh)					
			2015	2016	2017	2018	2019	2020
1	Save on Energy Coupon Program	2015	31,459,586	31,200,969	31,200,969	31,200,969	31,200,969	31,200,969
2	Save on Energy Heating & Cooling Program	2015	10,181,961	10,181,961	10,181,961	10,181,961	10,181,961	10,181,961
3	Save on Energy Home Assistance Program	2015	1,145,792	1,023,422	1,000,567	977,712	975,736	975,736
4	Save on Energy Audit Funding Program	2015	162,592	162,592	162,592	162,592	0	0
5	Save on Energy Retrofit Program	2015	19,243,297	19,243,297	19,148,137	19,148,137	19,148,137	19,147,625
6	EnerNOC Conservation Fund Pilot Program	2015	328,828	0	0	0	0	0
7	Loblaws P4P Conservation Fund Pilot Program	2015	8,311,388	8,311,388	8,311,388	8,311,388	8,311,388	8,311,388
8	Strategic Energy Group Conservation Fund Pilot Program	2015	17,391,939	0	0	0	0	0
9	Social Benchmarking Conservation Fund Pilot Program	2015	11,772,874	0	0	0	0	0
10	Appliance Retirement Initiative	2015	6,231,034	6,231,034	6,231,034	6,175,906	3,753,124	0
11	Coupon Initiative	2015	50,267,679	49,828,856	49,828,856	49,828,856	49,828,856	49,828,856
12	Bi-Annual Retailer Event Initiative	2015	74,495,781	72,999,617	72,999,617	72,999,617	72,999,617	72,999,617
13	HVAC Incentives Initiative	2015	45,965,427	45,965,427	45,965,427	45,965,427	45,965,427	45,965,427
14	Residential New Construction and Major Renovation Initiative	2015	6,305,281	6,305,281	6,305,281	6,305,281	6,305,281	6,305,281
15	Energy Audit Initiative	2015	26,333,804	26,333,804	26,333,804	26,333,804	0	0
16	Efficiency: Equipment Replacement Incentive Initiative	2015	653,480,201	653,480,201	649,488,705	649,044,165	649,044,165	648,322,776
17	Direct Install Lighting and Water Heating Initiative	2015	50,394,978	44,372,845	32,403,388	32,305,094	32,305,094	32,305,094
18	New Construction and Major Renovation Initiative	2015	22,022,383	22,022,383	21,803,839	21,803,839	21,792,687	21,792,687
19	Existing Building Commissioning Incentive Initiative	2015	947,849	947,849	947,849	0	0	0
20	Process and Systems Upgrades Initiatives - Project Incentive Initiative	2015	122,704,030	122,704,030	122,704,030	122,704,030	122,704,030	122,704,030
21	Process and Systems Upgrades Initiatives - Energy Manager Initiative	2015	35,834,323	29,839,419	25,637,011	25,615,603	25,352,262	25,183,067
22	Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiative	2015	1,369,000	0	0	0	0	0
23	Low Income Initiative	2015	14,906,764	12,591,796	12,202,967	11,823,381	11,746,825	11,746,825
24	Aboriginal Conservation Program	2015	3,627,223	3,335,277	3,289,343	3,243,409	3,243,409	3,243,409
25	Program Enabled Savings	2015	16,255,915	16,255,915	16,020,675	16,020,675	16,020,675	7,275,075
26	Save on Energy Coupon Program	2015 Adjustment	4,531,473	4,478,933	4,478,933	4,478,933	4,478,933	4,478,933
27	Save on Energy Heating & Cooling Program	2015 Adjustment	1,384,912	1,384,912	1,384,912	1,384,912	1,384,912	1,384,912
28	Save on Energy New Construction Program	2015 Adjustment	70,679	70,679	70,679	70,679	70,679	70,679
29	Save on Energy Home Assistance Program	2015 Adjustment	284,282	278,011	277,120	276,230	275,931	275,931
30	Save on Energy Audit Funding Program	2015 Adjustment	1,996,887	1,996,887	1,996,887	1,996,887	2,159,479	2,159,479
31	Save on Energy Retrofit Program	2015 Adjustment	87,909,143	87,359,467	87,068,850	86,846,493	86,846,493	86,577,438
32	Save on Energy High Performance New Construction Program	2015 Adjustment	478,377	478,377	478,377	478,377	478,377	478,377
33	Save on Energy Retrofit Program - P4P	2015 Adjustment	1,731,152	1,567,230	1,567,230	1,567,230	1,567,230	1,567,230
34	Direct Install - Hydronic Pilot Program	2015 Adjustment	667,979	667,979	667,979	667,979	667,979	667,979
35	Coupon Initiative	2015 Adjustment	9,686,247	9,574,814	9,574,814	9,574,814	9,574,814	9,574,814
36	Bi-Annual Retailer Event Initiative	2015 Adjustment	634,435	627,017	627,017	627,017	627,017	627,017
37	HVAC Incentives Initiative	2015 Adjustment	1,242,212	1,242,212	1,242,212	1,242,212	1,242,212	1,242,212
38	Residential New Construction and Major Renovation Initiative	2015 Adjustment	4,563,918	4,563,918	4,563,918	4,563,918	4,563,918	4,563,918
39	Energy Audit Initiative	2015 Adjustment	17,296,831	17,296,831	17,296,831	17,296,831	43,557,756	43,557,756
40	Efficiency: Equipment Replacement Incentive Initiative	2015 Adjustment	46,529,101	46,493,981	46,229,962	46,083,219	46,083,219	46,081,737
41	New Construction and Major Renovation Initiative	2015 Adjustment	27,140,198	27,140,198	27,358,742	27,358,742	27,358,742	27,358,742
42	Existing Building Commissioning Incentive Initiative	2015 Adjustment	316,077	316,077	316,077	316,077	316,077	316,077
43	Process and Systems Upgrades Initiatives - Project Incentive Initiative	2015 Adjustment	142,180,049	142,180,049	140,191,824	140,191,824	140,191,824	140,191,824

#	Program	Verification Period	Net Verified Annual Energy Savings at the End-User Level (kWh)					
			2015	2016	2017	2018	2019	2020
44	Process and Systems Upgrades Initiatives - Energy Manager Initiative	2015 Adjustment	125,317	125,317	125,317	125,317	125,317	0
45	Low Income Initiative	2015 Adjustment	1,722,061	1,633,901	1,618,770	1,603,638	1,601,364	1,601,364
46	Save on Energy Coupon Program	2016	-	427,989,595	427,989,595	427,989,595	427,989,595	427,989,595
47	Save on Energy Heating & Cooling Program	2016	-	76,249,162	76,249,162	76,249,162	76,249,162	76,249,162
48	Save on Energy New Construction Program	2016	-	1,624,371	1,624,371	1,624,371	1,624,371	1,624,371
49	Save on Energy Home Assistance Program	2016	-	7,590,437	7,564,689	7,538,941	7,538,941	7,538,941
50	Save on Energy Audit Funding Program	2016	-	2,799,382	2,799,382	2,799,382	2,799,382	2,799,382
51	Save on Energy Retrofit Program	2016	-	537,409,653	526,301,815	526,264,383	526,186,097	526,174,806
52	Save on Energy Small Business Lighting Program	2016	-	13,854,737	13,854,737	13,338,185	12,283,732	10,760,789
53	Save on Energy High Performance New Construction Program	2016	-	18,772,882	18,772,882	18,772,882	18,772,882	18,772,882
54	Save on Energy Process & Systems Upgrades Program	2016	-	778,676	778,676	778,676	778,676	778,676
55	Save on Energy Energy Manager Program	2016	-	16,362,558	14,420,651	13,609,714	13,429,453	13,429,453
56	Save on Energy Retrofit Program - P4P	2016	-	41,083,220	40,937,376	40,937,376	40,937,376	40,937,376
57	Save on Energy Process & Systems Upgrades Program - P4P	2016	-	10,957,531	10,957,531	10,957,531	10,957,531	10,957,531
58	Business Refrigeration Incentives Local Program	2016	-	1,173,928	1,169,607	1,169,607	1,017,433	928,060
59	PUMPSaver Local Program	2016	-	834,022	834,022	834,022	834,022	834,022
60	Building Optimization Pilot Program	2016	-	1,878,207	1,840,083	1,840,083	1,799,960	1,799,960
61	Direct Install - RTU Controls Pilot Program	2016	-	370,393	370,393	370,393	370,393	370,393
62	Electronics Takeback Pilot Program	2016	-	1,145,480	1,145,480	1,145,480	1,145,480	1,145,480
63	HONI HP Pilot Program	2016	-	205,088	205,088	205,088	205,088	205,088
64	P4P for Class B Office Pilot Program	2016	-	2,864,454	2,864,454	2,864,454	2,864,454	2,864,454
65	Residential Direct Install Pilot Program	2016	-	413,538	413,538	413,538	413,538	413,538
66	Residential Direct Mail Pilot Program	2016	-	347,825	347,825	347,825	347,825	347,825
67	Solar Powered Attic Ventilation Pilot Program	2016	-	178,202	178,202	178,202	178,202	178,202
68	Truckload Event Pilot Program	2016	-	6,807,732	6,807,732	6,807,732	6,807,732	6,807,732
69	Home Depot Home Appliance Market Uplift Conservation Fund Pilot Program	2016	-	58,726	58,726	58,726	58,726	58,726
70	Ontario Clean Water Agency P4P Conservation Fund Pilot Program	2016	-	188,353	188,353	188,353	188,353	188,353
<b>Sub-Total: 2015 Verified 2015 Results</b>			<b>1,231,139,929</b>	<b>1,183,337,363</b>	<b>1,162,167,440</b>	<b>1,160,151,846</b>	<b>1,130,879,643</b>	<b>1,117,489,823</b>
<b>Sub-Total: 2016 Verified 2015 Results Adjustment</b>			<b>350,491,330</b>	<b>349,476,790</b>	<b>347,136,451</b>	<b>346,751,329</b>	<b>373,172,273</b>	<b>372,776,419</b>
<b>Sub-Total: 2016 Verified 2016 Results</b>			<b>0</b>	<b>1,171,938,152</b>	<b>1,158,674,370</b>	<b>1,157,283,701</b>	<b>1,155,778,404</b>	<b>1,154,154,797</b>
<b>Total</b>			<b>1,581,631,259</b>	<b>2,704,752,305</b>	<b>2,667,978,261</b>	<b>2,664,186,876</b>	<b>2,659,830,320</b>	<b>2,644,421,039</b>

Table 7 provides annual peak demand savings persistence by year up to the year 2020 for each program in market in 2015 or 2016 by verification period.

**Table 7: Net Verified Annual Peak Demand Savings at the End-User Level**

#	Program	Verification Period	Net Verified Annual Peak Demand Savings at the End-User Level (kW)					
			2015	2016	2017	2018	2019	2020
1	Save on Energy Coupon Program	2015	2,025	2,008	2,008	2,008	2,008	2,008
2	Save on Energy Heating & Cooling Program	2015	5,322	5,322	5,322	5,322	5,322	5,322
3	Save on Energy Home Assistance Program	2015	213	206	205	204	204	204
4	Save on Energy Audit Funding Program	2015	35	35	35	35	0	0
5	Save on Energy Retrofit Program	2015	2,828	2,828	2,798	2,798	2,798	2,798
6	EnerNOC Conservation Fund Pilot Program	2015	0	0	0	0	0	0
7	Loblaws P4P Conservation Fund Pilot Program	2015	724	724	724	724	724	724
8	Strategic Energy Group Conservation Fund Pilot Program	2015	1,649	0	0	0	0	0
9	Social Benchmarking Conservation Fund Pilot Program	2015	1,055	0	0	0	0	0
10	Appliance Retirement Initiative	2015	1,027	1,027	1,027	965	552	0
11	Coupon Initiative	2015	3,285	3,257	3,257	3,257	3,257	3,257
12	Bi-Annual Retailer Event Initiative	2015	5,100	5,006	5,006	5,006	5,006	5,006
13	HVAC Incentives Initiative	2015	24,035	24,035	24,035	24,035	24,035	24,035
14	Residential New Construction and Major Renovation Initiative	2015	1,113	1,113	1,113	1,113	1,113	1,113
15	Energy Audit Initiative	2015	5,614	5,614	5,614	5,614	0	0
16	Efficiency: Equipment Replacement Incentive Initiative	2015	93,596	93,596	92,356	92,226	92,226	92,012
17	Direct Install Lighting and Water Heating Initiative	2015	11,893	10,536	7,454	7,432	7,432	7,432
18	New Construction and Major Renovation Initiative	2015	5,222	5,222	5,190	5,190	5,188	5,188
19	Existing Building Commissioning Incentive Initiative	2015	437	437	437	0	0	0
20	Process and Systems Upgrades Initiatives - Project Incentive Initiative	2015	13,649	13,649	13,649	13,649	13,649	13,649
21	Process and Systems Upgrades Initiatives - Energy Manager Initiative	2015	7,590	6,320	5,472	5,467	5,420	5,371
22	Low Income Initiative	2015	2,225	2,105	2,085	2,066	2,064	2,064
23	Aboriginal Conservation Program	2015	625	610	607	605	605	605
24	Program Enabled Savings	2015	1,145	1,145	1,119	1,119	1,119	142
25	Save on Energy Coupon Program	2015 Adjustment	297	294	294	294	294	294
26	Save on Energy Heating & Cooling Program	2015 Adjustment	711	711	711	711	711	711
27	Save on Energy New Construction Program	2015 Adjustment	15	15	15	15	15	15
28	Save on Energy Home Assistance Program	2015 Adjustment	39	39	39	39	39	39
29	Save on Energy Audit Funding Program	2015 Adjustment	426	426	426	426	460	460
30	Save on Energy Retrofit Program	2015 Adjustment	12,716	12,548	12,461	12,399	12,399	12,377
31	Save on Energy High Performance New Construction Program	2015 Adjustment	96	96	96	96	96	96

#	Program	Verification Period	Net Verified Annual Peak Demand Savings at the End-User Level (kW)					
			2015	2016	2017	2018	2019	2020
32	Save on Energy Retrofit Program - P4P	2015 Adjustment	341	296	296	296	296	296
33	Direct Install - Hydronic Pilot Program	2015 Adjustment	68	68	68	68	68	68
34	Coupon Initiative	2015 Adjustment	629	622	622	622	622	622
35	Bi-Annual Retailer Event Initiative	2015 Adjustment	41	40	40	40	40	40
36	HVAC Incentives Initiative	2015 Adjustment	641	641	641	641	641	641
37	Residential New Construction and Major Renovation Initiative	2015 Adjustment	252	252	252	252	252	252
38	Energy Audit Initiative	2015 Adjustment	3,684	3,684	3,684	3,684	9,657	9,657
39	Efficiency: Equipment Replacement Incentive Initiative	2015 Adjustment	7,176	7,163	7,081	7,034	7,034	7,033
40	New Construction and Major Renovation Initiative	2015 Adjustment	7,197	7,197	7,229	7,229	7,229	7,229
41	Existing Building Commissioning Incentive Initiative	2015 Adjustment	106	106	106	106	106	106
42	Process and Systems Upgrades Initiatives - Project Incentive Initiative	2015 Adjustment	7,757	7,757	7,545	7,545	7,545	7,545
43	Process and Systems Upgrades Initiatives - Energy Manager Initiative	2015 Adjustment	0	0	0	0	0	0
44	Low Income Initiative	2015 Adjustment	477	472	471	471	471	471
45	Save on Energy Coupon Program	2016	-	27,830	27,830	27,830	27,830	27,830
46	Save on Energy Heating & Cooling Program	2016	-	22,421	22,421	22,421	22,421	22,421
47	Save on Energy New Construction Program	2016	-	355	355	355	355	355
48	Save on Energy Home Assistance Program	2016	-	827	826	825	825	825
49	Save on Energy Audit Funding Program	2016	-	365	365	365	365	365
50	Save on Energy Retrofit Program	2016	-	72,374	70,461	70,461	70,441	70,440
51	Save on Energy Small Business Lighting Program	2016	-	2,612	2,612	2,569	2,478	2,287
52	Save on Energy High Performance New Construction Program	2016	-	5,693	5,693	5,693	5,693	5,693
53	Save on Energy Process & Systems Upgrades Program	2016	-	61	61	61	61	61
54	Save on Energy Energy Manager Program	2016	-	1,510	1,418	1,326	1,326	1,326
55	Save on Energy Retrofit Program - P4P	2016	-	4,244	4,197	4,197	4,197	4,197
56	Save on Energy Process & Systems Upgrades Program - P4P	2016	-	1,596	1,596	1,596	1,596	1,596
57	Business Refrigeration Incentives Local Program	2016	-	160	158	158	132	117
58	PUMPsaver Local Program	2016	-	75	75	75	75	75
59	Building Optimization Pilot Program	2016	-	828	809	809	806	806
60	Direct Install - RTU Controls Pilot Program	2016	-	27	27	27	27	27
61	Electronics Takeback Pilot Program	2016	-	36	36	36	36	36
62	HONI HP Pilot Program	2016	-	4	4	4	4	4
63	P4P for Class B Office Pilot Program	2016	-	2	2	2	2	2
64	Residential Direct Install Pilot Program	2016	-	29	29	29	29	29
65	Residential Direct Mail Pilot Program	2016	-	23	23	23	23	23
66	Solar Powered Attic Ventilation Pilot Program	2016	-	199	199	199	199	199
67	Truckload Event Pilot Program	2016	-	428	428	428	428	428
68	Home Depot Home Appliance Market Uplift Conservation Fund Pilot Program	2016	-	9	9	9	9	9
69	Ontario Clean Water Agency P4P Conservation Fund Pilot Program	2016	-	18	18	18	18	18
<b>Sub-Total: 2015 Verified 2015 Results</b>			<b>190,407</b>	<b>184,795</b>	<b>179,513</b>	<b>178,835</b>	<b>172,722</b>	<b>170,930</b>
<b>Sub-Total: 2016 Verified 2015 Results Adjustment</b>			<b>42,669</b>	<b>42,427</b>	<b>42,077</b>	<b>41,968</b>	<b>47,975</b>	<b>47,952</b>
<b>Sub-Total: 2016 Verified 2016 Results</b>			<b>0</b>	<b>141,726</b>	<b>139,652</b>	<b>139,516</b>	<b>139,376</b>	<b>139,169</b>
<b>Total</b>			<b>233,076</b>	<b>368,948</b>	<b>361,242</b>	<b>360,319</b>	<b>360,073</b>	<b>358,051</b>

## 2.5 - LDC CDM PLAN BUDGET SPENDING

Table 8 provides the participant incentive spending for each program in market in 2015 or 2016 by verification period.

**Table 8: LDC CDM Plan Budget Participant Incentive Spending**

#	Program	LDC CDM Plan Budget Participant Incentive Spending (\$)			
		2015	2015 Adjustment	2016	Total
1	Save on Energy Coupon Program	3,845,994	0	27,881,261	31,727,255
2	Save on Energy Heating & Cooling Program	6,213,250	-35,350	31,540,950	37,718,850
3	Save on Energy New Construction Program	0	0	631,532	631,532
4	Save on Energy Home Assistance Program	753,158	0	4,839,355	5,592,513
5	Save on Energy Audit Funding Program	6,420	0	543,115	549,535
6	Save on Energy Retrofit Program	2,662,418	0	56,156,230	58,818,648
7	Save on Energy Small Business Lighting Program	0	0	2,034,251	2,034,251
8	Save on Energy High Performance New Construction Program	0	0	1,424,439	1,424,439
9	Save on Energy Existing Building Commissioning Program	0	0	66,640	66,640
10	Save on Energy Process & Systems Upgrades Program	16,893	0	2,742,147	2,759,040
11	Save on Energy Energy Manager Program	0	0	1,405,066	1,405,066
12	Save on Energy Monitoring & Targeting Program	0	0	31,816	31,816
13	Save on Energy Retrofit Program - P4P	0	0	272,373	272,373
14	Business Refrigeration Incentives Local Program	0	0	136,783	136,783
<b>Total</b>		<b>13,498,133</b>	<b>-35,350</b>	<b>129,705,958</b>	<b>143,168,741</b>

Table 9 provides the administrative expense spending, including IESO Value-Added Services costs as applicable, for each program in market in 2015 or 2016 by verification period.

**Table 9: LDC CDM Plan Budget Administrative Expense Spending**

#	Program	LDC CDM Plan Budget Administrative Expense Spending (\$)			Total
		2015	2015 Adjustment	2016	
1	Save on Energy Coupon Program	1,577,290	157,526	8,853,156	10,587,972
2	Save on Energy Heating & Cooling Program	466,132	88,583	4,183,526	4,738,241
3	Save on Energy New Construction Program	16,829	19,272	1,078,795	1,114,896
4	Save on Energy Home Assistance Program	149,262	100,017	2,637,793	2,887,072
5	Save on Energy Audit Funding Program	167,592	43,261	1,527,563	1,738,416
6	Save on Energy Retrofit Program	5,895,425	1,454,631	35,016,210	42,366,266
7	Save on Energy Small Business Lighting Program	0	75,438	3,299,093	3,374,531
8	Save on Energy High Performance New Construction Program	148,817	41,141	2,893,601	3,083,559
9	Save on Energy Existing Building Commissioning Program	0	3,333	526,893	530,226
10	Save on Energy Process & Systems Upgrades Program	341,070	312,940	4,897,016	5,551,026
11	Save on Energy Energy Manager Program	156,835	32,158	720,547	909,540
12	Save on Energy Monitoring & Targeting Program	9,180	10,326	24,304	43,810
13	Save on Energy Process & Systems Upgrades Program - P4P	0	0	5	5
14	Adaptive Thermostat Local Program	0	0	26,672	26,672
15	Business Refrigeration Incentives Local Program	0	3,789	404,753	408,542
16	Conservation on the Coast Home Assistance Local Program	0	0	7,021	7,021
17	First Nations Conservation Local Program	0	0	355,623	355,623
18	Instant Savings Local Program	0	0	4,571	4,571
19	PUMPSaver Local Program	0	0	100,075	100,075
20	Social Benchmarking Local Program	0	1,745	9,214,899	9,216,644
21	Performance Based Conservation Pilot Program	0	312	0	312
22	Solar Powered Attic Ventilation Pilot Program	0	4,194	0	4,194
23	Proposed Program or Pilot	-	31,989	-	31,989
24	Unassigned Target	-	16,353	-	16,353
<b>Total</b>		<b>8,928,432</b>	<b>2,397,008</b>	<b>75,772,116</b>	<b>87,097,556</b>

Table 10 provides the total LDC CDM Plan Budget spending for each program in market in 2015 or 2016 by verification period. Table 10 is the equivalent of the sum of Table 8 - participant incentive spending and Table 9- administrative expense spending.

**Table 10: LDC CDM Plan Budget Total Spending**

#	Program	LDC CDM Plan Budget Total Spending (\$)			Total
		2015	2015 Adjustment	2016	
1	Save on Energy Coupon Program	5,423,284	157,526	36,734,417	42,315,227
2	Save on Energy Heating & Cooling Program	6,679,382	53,233	35,724,476	42,457,091
3	Save on Energy New Construction Program	16,829	19,272	1,710,327	1,746,428
4	Save on Energy Home Assistance Program	902,420	100,017	7,477,149	8,479,586
5	Save on Energy Audit Funding Program	174,012	43,261	2,070,678	2,287,951
6	Save on Energy Retrofit Program	8,557,843	1,454,631	91,172,440	101,184,914
7	Save on Energy Small Business Lighting Program	0	75,438	5,333,344	5,408,782
8	Save on Energy High Performance New Construction Program	148,817	41,141	4,318,040	4,507,998
9	Save on Energy Existing Building Commissioning Program	0	3,333	593,533	596,866
10	Save on Energy Process & Systems Upgrades Program	357,963	312,940	7,639,163	8,310,066
11	Save on Energy Energy Manager Program	156,835	32,158	2,125,612	2,314,605
12	Save on Energy Monitoring & Targeting Program	9,180	10,326	56,120	75,626
13	Save on Energy Retrofit Program - P4P	0	0	272,373	272,373
14	Save on Energy Process & Systems Upgrades Program - P4P	0	0	5	5
15	Adaptive Thermostat Local Program	0	0	26,672	26,672
16	Business Refrigeration Incentives Local Program	0	3,789	541,536	545,325
17	Conservation on the Coast Home Assistance Local Program	0	0	7,021	7,021
18	First Nations Conservation Local Program	0	0	355,623	355,623
19	Instant Savings Local Program	0	0	4,571	4,571
20	PUMPSaver Local Program	0	0	100,075	100,075
21	Social Benchmarking Local Program	0	1,745	9,214,899	9,216,644
22	Performance Based Conservation Pilot Program	0	312	0	312
23	Solar Powered Attic Ventilation Pilot Program	0	4,194	0	4,194
24	Proposed Program or Pilot	-	31,989	-	31,989
25	Unassigned Target	-	16,353	-	16,353
<b>Total</b>		<b>22,426,565</b>	<b>2,361,658</b>	<b>205,478,075</b>	<b>230,266,298</b>

## 2.6 - OTHER CDM PROGRAM SPENDING

Tables 11 and 12 provide detail on the spending associated with the previously described IESO Central Services budget during the 2015 and 2016 program years.

**Table 11: IESO Central Services Spending**

#	Program	IESO Central Services Budget Spending (\$)		
		2015	2016	Total
1	Central Services - EM&V and Compliance	42,050	89,139	131,189
2	Central Services - Province-Wide Marketing	1,253,370	7,956,162	9,209,532
3	Central Services - Market Research	51,960	2,285,017	2,336,977
4	Central Services - Program Delivery (Industrial Technical Reviewer and Compliance)	0	8,077,390	8,077,390
5	Central Services - National Accounts	0	0	0
6	Central Services - Capability Building	4,152	77,721	81,873
7	Central Services - Provincial Energy Managers	0	160,000	160,000
8	Central Services - IESO Infrastructure (IS, IT, CRM, Call Centre)	811,565	1,577,034	2,388,599
9	Central Services - Technical Support	18,480	218,103	236,583
10	Central Services - Energy Performance Program for Multi-Site Customers	0	0	0
11	LDC Collaboration Fund	75,065	1,663,347	1,738,412
12	LDC Innovation Fund	807,519	5,431,489	6,239,008
13	LDC Performance Incentives	0	0	0
<b>Total</b>		<b>3,064,160</b>	<b>27,535,401</b>	<b>30,599,562</b>

**Table 12: 2011 - 2014 + 2015 Extension Legacy Framework Program Spending**

#	Program	2015			2016			2015 - 2016		
		Participant Incentives	Program Cost	Total	Participant Incentives	Program Cost	Total	Participant Incentives	Program Cost	Total
1	Appliance Retirement Initiative	1,415,363	1,373,366	2,788,729	0	624,481	624,481	1,415,363	1,997,847	3,413,210
2	Coupon Initiative	11,673,668	3,106,876	14,780,544	1,505,386	407,792	1,913,178	13,179,054	3,514,668	16,693,722
3	Bi-Annual Retailer Event Initiative	13,336,646	5,069,642	18,406,288	1,903,084	382,722	2,285,805	15,239,730	5,452,364	20,692,093
4	HVAC Incentives Initiative	46,234,767	5,493,705	51,728,472	660,671	364,599	1,025,270	46,895,438	5,858,304	52,753,742
5	Residential New Construction and Major Renovation Initiative	1,676,592	1,271,753	2,948,345	2,071,920	83,689	2,155,609	3,748,512	1,355,442	5,103,954
6	Energy Audit Initiative	3,618,843	2,037,629	5,656,472	937,211	210,039	1,147,250	4,556,054	2,247,668	6,803,722
7	Efficiency: Equipment Replacement Incentive Initiative	88,999,088	26,009,978	115,009,066	45,202,471	2,627,024	47,829,495	134,201,559	28,637,002	162,838,561
8	Direct Install Lighting and Water Heating Initiative	29,248,929	10,337,570	39,586,499	-4,713,402	-533,521	-5,246,923	24,535,527	9,804,049	34,339,576
9	New Construction and Major Renovation Initiative	10,282,582	3,498,880	13,781,462	11,990,605	834,019	12,824,624	22,273,187	4,332,899	26,606,086
10	Existing Building Commissioning Incentive Initiative	625,464	716,749	1,342,213		86,281	357,525	896,708	803,030	1,699,738
11	Process and Systems Upgrades Initiatives - Project Incentive Initiative	56,214,368	12,269,255	68,483,623	14,122,885	346,478	14,469,364	70,337,253	12,615,733	82,952,987
12	Process and Systems Upgrades Initiatives - Energy Manager Initiative	5,158,632	4,323,680	9,482,312	1,366,831	427,281	1,794,112	6,525,463	4,750,961	11,276,424
13	Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiative	304,500	376,234	680,734	314,852	3,771	318,623	619,352	380,005	999,357
14	Low Income Initiative	16,065,537	5,012,080	21,077,617	1,757,920	-104,985	1,652,935	17,823,457	4,907,095	22,730,552
15	Aboriginal Conservation Program	5,778,058	1,601,184	7,379,242	0	-30,273	-30,273	5,778,058	1,570,911	7,348,969
16	Other	16,265,851	10,417,627	26,683,478	7,163,957	5,283,810	10,338,557	23,429,808	15,701,437	37,022,035
<b>Total</b>		<b>306,898,888</b>	<b>92,916,208</b>	<b>399,815,096</b>	<b>84,555,635</b>	<b>11,013,206</b>	<b>95,568,841</b>	<b>391,454,523</b>	<b>103,929,414</b>	<b>495,383,937</b>

## 2.7 - LDC CDM PROGRAM COST-EFFECTIVENESS

Table 13 details LDC CDM program cost-effectiveness test results for the 2016 program year.

**Table 13: 2016 Program Year LDC CDM Program Cost Effectiveness Test Results**

#	Program	Total Resource Cost Test		Program Administrator Cost Test		Levelized Unit Energy Cost (¢/kWh)
		Net Benefit (\$ M)	Net Benefit Ratio	Net Benefit (\$ M)	Net Benefit Ratio	
1	Save on Energy Coupon Program	409	18.56	203	4.67	1.23
2	Save on Energy Heating & Cooling Program	28	1.36	47	2.05	5.05
3	Save on Energy New Construction Program	- 5	0.27	-1	0.61	14.08
4	Save on Energy Home Assistance Program	- 0.4	0.94	-1	0.81	7.75
5	Save on Energy Audit Funding Program	12	2.04	-1	0.59	10.97
6	Save on Energy Retrofit Program	47	1.15	236	3.07	2.19
7	Save on Energy Small Business Lighting Program	0.4	1.06	0.6	1.11	6.93
8	Save on Energy High Performance New Construction Program	20	3.44	20	6.13	1.73
9	Save on Existing Building Commissioning Program	0.2	1.37	0.1	1.19	4.15
10	Save on Energy Process & Systems Upgrades Program	- 1	0.88	5	1.95	3.64
11	Save on Energy Energy Manager Program	3.6	2.57	5	7.21	0.79
12	Save on Energy Monitoring & Targeting Program	- 0.02	4.45	-0.2	6.98	1.69
<b>Total</b>		<b>515</b>	<b>2.25</b>	<b>514</b>	<b>3.43</b>	<b>2.10</b>

## 2.8 - LDC LIST AMENDMENTS

Table 14 shows the list of LDCs as of December 31, 2016 and amendments (if any) relative to the LDC CDM Targets and Budgets included in the Conservation First Framework LDC Tool Kit version 1.0, October 31, 2014.

**Table 14: 2016 LDC List**

#	LDC	Amendments
1	Algoma Power Inc.	
2	Atikokan Hydro Inc.	
3	Attawapiskat Power Corporation	
4	Bluewater Power Distribution Corporation	
5	Brantford Power Inc.	
6	Burlington Hydro Inc.	
7	Canadian Niagara Power Inc.	
8	Centre Wellington Hydro Ltd.	
9	Chapleau Public Utilities Corporation	
10	COLLUS PowerStream Corp.	
11	Cooperative Hydro Embrun Inc.	
12	E.L.K. Energy Inc.	
13	Energy+ Inc.	
14	Enersource Hydro Mississauga Inc.	Amalgamated with Horizon Utilities Corporation, Hydro One Brampton Networks Inc. and PowerStream Inc. effective September 29, 2017. Will be represented as Alectra Utilities Corporation in future 2017 annual reporting.
15	Entegrus Powerlines Inc.	
16	EnWin Utilities Ltd.	
17	Erie Thames Powerlines Corporation	
18	Espanola Regional Hydro Distribution Corporation	
19	Essex Powerlines Corporation	
20	Festival Hydro Inc.	
21	Fort Albany Power Corporation	
22	Fort Frances Power Corporation	
23	Greater Sudbury Hydro Inc.	
24	Grimsby Power Incorporated	
25	Guelph Hydro Electric Systems Inc.	
26	Halton Hills Hydro Inc.	
27	Hearst Power Distribution Company Limited	
28	Horizon Utilities Corporation	Amalgamated with Enersource Hydro Mississauga Inc., Hydro One Brampton Networks Inc. and PowerStream Inc. effective September 29, 2017. Will be represented as Alectra Utilities Corporation in future 2017 annual reporting.
29	Hydro 2000 Inc.	
30	Hydro Hawkesbury Inc.	
31	Hydro One Brampton Networks Inc.	Amalgamated with Enersource Hydro Mississauga Inc., Horizon Utilities Corporation and PowerStream Inc. effective September 29, 2017. Will be represented as Alectra Utilities Corporation in future 2017 annual reporting.
32	Hydro One Networks Inc.	Amalgamated with Norfolk Power Distribution Inc., effective January 1, 2016.
33	Hydro Ottawa Limited	Amalgamated with Haldimand County Hydro Inc. and Woodstock Hydro Services Inc., effective September 1, 2016.
34	InnPower Corporation	

#	LDC	Amendments
35	Kashechewan Power Corporation	
36	Kenora Hydro Electric Corporation Ltd.	
37	Kingston Hydro Corporation	
38	Kitchener-Wilmot Hydro Inc.	
39	Lakefront Utilities Inc.	
40	Lakeland Power Distribution Ltd.	Amalgamated with Parry Sound Power Corporation, effective July 1, 2014.
41	London Hydro Inc.	
42	Midland Power Utility Corporation	
43	Milton Hydro Distribution Inc.	
44	Newmarket-Tay Power Distribution Ltd.	
45	Niagara Peninsula Energy Inc.	
46	Niagara-on-the-Lake Hydro Inc.	
47	North Bay Hydro Distribution Limited	
48	Northern Ontario Wires Inc.	
49	Oakville Hydro Electricity Distribution Inc.	
50	Orangeville Hydro Limited	
51	Orillia Power Distribution Corporation	
52	Oshawa PUC Networks Inc.	
53	Ottawa River Power Corporation	
54	Peterborough Distribution Incorporated	
55	PowerStream Inc.	Amalgamated with Enersource Hydro Mississauga Inc., Horizon Utilities Corporation and Hydro One Brampton Networks Inc. effective September 29, 2017. Will be represented as Alectra Utilities Corporation in future 2017 annual reporting.
56	PUC Distribution Inc.	
57	Renfrew Hydro Inc.	
58	Rideau St. Lawrence Distribution Inc.	
59	Sioux Lookout Hydro Inc.	
60	St. Thomas Energy Inc.	
61	Thunder Bay Hydro Electricity Distribution Inc.	
62	Tillsonburg Hydro Inc.	
63	Toronto Hydro-Electric System Limited	
64	Veridian Connections Inc.	
65	Wasaga Distribution Inc.	
66	Waterloo North Hydro Inc.	
67	Welland Hydro-Electric System Corp.	
68	Wellington North Power Inc.	
69	West Coast Huron Energy Inc.	
70	Westario Power Inc.	
71	Whitby Hydro Electric Corporation	

## 2.9 - LDC RESULTS - PROGRESS TOWARDS 2015-2020 CFF LDC CDM PLAN ALLOCATED TARGET

Table 15 provides each LDC's:

- savings achievement as of the end of 2016;
- their own LDC CDM Plan Forecast for 2015-2016;
- the savings achievement compared to the Forecast;
- allocated CFF LDC CDM Plan Target; and
- the savings achievement compared to the Target

Savings attributed to the IESO are a result of conservation program participation in centrally delivered conservation programs in the service territories of LDCs that do not deliver such programs, as per LDCs own CDM Plans.

**Table 15: LDC Results - Savings**

#	LDC	Net Verified 2020 Annual Energy Savings (kWh)	LDC CDM Plan Forecasted Net 2020 Annual Energy Savings from 2015-2016 Programs (kWh) <sup>v</sup>	Progress Towards LDC CDM Plan Forecasted Net 2020 Annual Energy Savings from 2015-2016 Programs (%)	Allocated 2015 - 2020 CFF LDC CDM Plan Target (kWh)	Progress Towards Allocated 2015 - 2020 CFF LDC CDM Plan Target (%)
1	Algoma Power Inc.	2,342,230	1,777,226	132	7,510,000	31
2	Atikokan Hydro Inc.	301,570	170,828	177	1,140,000	26
3	Attawapiskat Power Corporation	38,165	209,344	18	510,000	7
4	Bluewater Power Distribution Corporation	13,594,611	14,839,910	92	62,370,000	22
5	Brantford Power Inc.	19,414,989	17,760,851	109	54,320,000	36
6	Burlington Hydro Inc.	26,140,115	18,090,682	144	99,040,000	26
7	Canadian Niagara Power Inc.	14,635,484	11,046,585	132	28,480,000	51
8	Centre Wellington Hydro Ltd.	3,239,975	4,123,814	79	8,730,000	37
9	Chapleau Public Utilities Corporation	470,529	508,197	93	1,050,000	45
10	COLLUS PowerStream Corp.	4,218,225	3,784,720	111	16,860,000	25
11	Cooperative Hydro Embrun Inc.	870,483	320,602	272	1,790,000	49
12	E.L.K. Energy Inc.	4,209,775	3,064,492	137	16,200,000	26
13	Energy+ Inc.	91,524,019	67,208,866	136	100,950,000	91
14	Enersource Hydro Mississauga Inc.	156,277,316	149,356,740	105	483,270,000	32
15	Entegrus Powerlines Inc.	56,281,145	34,007,927	165	56,830,000	99
16	EnWin Utilities Ltd.	46,850,707	64,562,249	73	151,300,000	31
17	Erie Thames Powerlines Corporation	8,657,726	21,956,460	39	27,630,000	31
18	Espanola Regional Hydro Distribution Corporation	856,521	328,608	261	2,410,000	36
19	Essex Powerlines Corporation	12,599,107	9,728,188	130	31,430,000	40
20	Festival Hydro Inc.	16,328,885	4,336,821	377	34,650,000	47
21	Fort Albany Power Corporation	31,862	197,235	16	340,000	9
22	Fort Frances Power Corporation	819,838	486,914	168	4,000,000	20
23	Greater Sudbury Hydro Inc.	19,413,460	3,943,302	492	34,740,000	56
24	Grimsby Power Incorporated	5,282,896	3,670,614	144	10,850,000	49
25	Guelph Hydro Electric Systems Inc.	69,204,463	59,741,607	116	99,040,000	70
26	Halton Hills Hydro Inc.	10,469,112	6,234,990	168	30,940,000	34
27	Hearst Power Distribution Company Limited	4,913,361	1,033,780	475	3,180,000	155
28	Horizon Utilities Corporation	122,423,572	116,705,818	105	330,680,000	37
29	Hydro 2000 Inc.	342,066	215,261	159	1,360,000	25
30	Hydro Hawkesbury Inc.	2,528,454	2,406,871	105	7,920,000	32
31	Hydro One Brampton Networks Inc.	77,531,030	70,364,866	110	255,160,000	30
32	Hydro One Networks Inc.	518,763,860	477,719,756	109	1,220,690,000	42
33	Hydro Ottawa Limited	132,049,269	99,489,881	133	394,540,000	33
34	InnPower Corporation	4,543,677	4,728,558	96	13,010,000	35
35	Kashechewan Power Corporation	42,829	209,344	20	520,000	8
36	Kenora Hydro Electric Corporation Ltd.	2,224,774	1,596,071	139	5,270,000	42
37	Kingston Hydro Corporation	8,073,324	14,206,168	57	34,500,000	23
38	Kitchener-Wilmot Hydro Inc.	38,704,692	27,136,429	143	105,710,000	37
39	Lakefront Utilities Inc.	3,705,727	3,639,829	102	12,170,000	30
40	Lakeland Power Distribution Ltd.	7,636,510	4,319,290	177	15,770,000	48
41	London Hydro Inc.	63,813,698	63,862,340	100	196,660,000	32
42	Midland Power Utility Corporation	5,565,096	3,063,543	182	10,830,000	51
43	Milton Hydro Distribution Inc.	16,866,689	9,970,719	169	45,360,000	37
44	Newmarket-Tay Power Distribution Ltd.	14,021,538	4,271,910	328	36,240,000	39
45	Niagara Peninsula Energy Inc.	25,332,796	20,191,139	125	74,440,000	34
46	Niagara-on-the-Lake Hydro Inc.	6,369,062	6,289,627	101	11,680,000	55
47	North Bay Hydro Distribution Limited	20,674,212	2,300,259	899	20,260,000	102
48	Northern Ontario Wires Inc.	1,455,549	492,913	295	4,310,000	34
49	Oakville Hydro Electricity Distribution Inc.	39,183,630	34,517,814	114	92,390,000	42
50	Orangeville Hydro Limited	5,769,766	2,889,637	200	14,150,000	41
51	Orillia Power Distribution Corporation	3,917,160	7,529,238	52	16,580,000	24
52	Oshawa PUC Networks Inc.	17,677,934	24,199,815	73	73,010,000	24
53	Ottawa River Power Corporation	4,748,712	2,614,339	182	8,720,000	54
54	Peterborough Distribution Incorporated	10,721,314	25,666,491	42	37,880,000	28
55	PowerStream Inc.	200,506,286	165,941,199	121	535,440,000	37
56	PUC Distribution Inc.	13,990,513	3,121,781	448	26,410,000	53
57	Renfrew Hydro Inc.	802,214	946,461	85	4,170,000	19
58	Rideau St. Lawrence Distribution Inc.	2,020,581	1,627,920	124	5,020,000	40
59	Sioux Lookout Hydro Inc.	1,030,214	764,616	135	3,700,000	28
60	St. Thomas Energy Inc.	6,526,446	1,971,651	331	17,510,000	37
61	Thunder Bay Hydro Electricity Distribution Inc.	25,694,979	36,097,692	71	48,420,000	53
62	Tillsonburg Hydro Inc.	2,803,451	1,483,941	189	11,310,000	25
63	Toronto Hydro-Electric System Limited	544,957,695	467,933,206	116	1,576,050,000	35
64	Veridian Connections Inc.	37,112,875	31,199,796	119	152,970,000	24
65	Wasaga Distribution Inc.	3,576,694	1,837,059	195	6,320,000	57
66	Waterloo North Hydro Inc.	24,460,438	15,800,261	155	82,380,000	30

<sup>v</sup> forecast as of LDC submitted CDM Plans as of April 1, 2017

#	LDC	Net Verified 2020 Annual Energy Savings (kWh)	LDC CDM Plan Forecasted Net 2020 Annual Energy Savings from 2015-2016 Programs (kWh) <sup>vi</sup>	Progress Towards LDC CDM Plan Forecasted Net 2020 Annual Energy Savings from 2015-2016 Programs (%)	Allocated 2015 - 2020 CFF LDC CDM Plan Target (kWh)	Progress Towards Allocated 2015 - 2020 CFF LDC CDM Plan Target (%)
67	Welland Hydro-Electric System Corp.	5,376,290	8,694,159	62	25,500,000	21
68	Wellington North Power Inc.	1,318,666	1,467,327	90	5,890,000	22
69	West Coast Huron Energy Inc.	2,513,526	1,752,338	143	8,080,000	31
70	Westario Power Inc.	8,639,870	9,007,283	96	23,010,000	38
71	Whitby Hydro Electric Corporation	17,076,491	15,473,631	110	58,440,000	29
	Independent Electricity System Operator	2,340,305	n/a	n/a	0	n/a
	<b>Total</b>	<b>2,644,421,042</b>	<b>2,298,209,799</b>	<b>115</b>	<b>6,999,990,000</b>	<b>38</b>

## 2.10 - LDC RESULTS - SPENDING TOWARDS 2015-2020 CFF LDC CDM PLAN ALLOCATED BUDGET

Table 16 provides each LDC's:

- LDC CDM Plan Budget spending as of the end of 2016;
- their own LDC CDM Plan Forecast for 2015-2016;
- the spending compared to the Forecast;
- allocated CFF LDC CDM Plan Budget; and
- the spending compared to the Budget;

**Table 16: LDC Results - Spending**

#	LDC	2015-2016 LDC CDM Plan Budget Spending (\$)	LDC CDM Plan Forecasted 2015-2016 LDC CDM Plan Budget Spending (\$) <sup>vi</sup>	Spending Towards LDC CDM Plan Forecasted 2015-2016 LDC CDM Plan Budget (%)	Allocated 2015 - 2020 CFF LDC CDM Plan Budget (\$)	Spending Towards Allocated 2015 - 2020 CFF LDC CDM Plan Budget (%)
1	Algoma Power Inc.	444,108	737,814	60	2,107,963	21
2	Atikokan Hydro Inc.	50,265	56,772	89	311,330	16
3	Attawapiskat Power Corporation	0	386,748	0	148,832	0
4	Bluewater Power Distribution Corporation	1,346,056	2,584,380	52	15,838,687	8
5	Brantford Power Inc.	1,593,432	2,236,285	71	14,048,458	11
6	Burlington Hydro Inc.	2,784,017	4,877,008	57	25,825,521	11
7	Canadian Niagara Power Inc.	1,421,364	1,643,473	86	7,355,555	19
8	Centre Wellington Hydro Ltd.	276,194	651,826	42	2,252,724	12
9	Chapleau Public Utilities Corporation	23,244	57,618	40	298,764	8
10	COLLUS PowerStream Corp.	794,008	1,118,451	71	4,446,841	18
11	Cooperative Hydro Embrun Inc.	61,223	78,227	78	525,743	12
12	E.L.K. Energy Inc.	435,083	504,219	86	4,273,057	10
13	Energy+ Inc.	2,916,887	4,939,935	59	25,873,071	11
14	Enersource Hydro Mississauga Inc.	5,508,332	23,154,175	24	122,499,403	4
15	Entegrus Powerlines Inc.	2,805,014	3,048,339	92	14,695,867	19
16	EnWin Utilities Ltd.	2,542,346	11,447,244	22	38,421,929	7
17	Eric Thames Powerlines Corporation	604,060	1,524,690	40	7,104,954	9
18	Espanola Regional Hydro Distribution Corporation	63,275	141,751	45	685,489	9
19	Essex Powerlines Corporation	2,002,304	2,199,199	91	8,532,573	23
20	Festival Hydro Inc.	1,011,939	1,323,777	76	8,768,149	12
21	Fort Albany Power Corporation	0	345,251	0	98,990	0
22	Fort Frances Power Corporation	92,580	124,601	74	1,109,758	8
23	Greater Sudbury Hydro Inc.	1,538,180	1,701,015	90	9,672,498	16
24	Grimsby Power Incorporated	327,426	633,209	52	2,894,613	11
25	Guelph Hydro Electric Systems Inc.	1,759,447	4,255,743	41	24,920,625	7
26	Halton Hills Hydro Inc.	604,017	1,458,606	41	8,387,497	7
27	Hearst Power Distribution Company Limited	81,272	122,762	66	843,903	10
28	Horizon Utilities Corporation	12,936,258	17,664,321	73	84,830,304	15
29	Hydro 2000 Inc.	41,957	56,806	74	394,750	11
30	Hydro Hawkesbury Inc.	189,396	399,100	47	2,139,160	9
31	Hydro One Brampton Networks Inc.	7,818,006	14,994,829	52	66,798,531	12
32	Hydro One Networks Inc.	46,513,930	63,838,190	73	338,355,409	14
33	Hydro Ottawa Limited	13,858,927	17,591,400	79	105,242,155	13

<sup>vi</sup> Forecast as of LDC-submitted CDM Plans as of April 1, 2017.

#	LDC	2015-2016 LDC CDM Plan Budget Spending (\$)	LDC CDM Plan Forecasted 2015-2016 LDC CDM Plan Budget Spending (\$) <sup>vi</sup>	Spending Towards LDC CDM Plan Forecasted 2015-2016 LDC CDM Plan Budget (%)	Allocated 2015 - 2020 CFF LDC CDM Plan Budget (\$)	Spending Towards Allocated 2015 - 2020 CFF LDC CDM Plan Budget (%)
34	InnPower Corporation	467,510	851,157	55	3,680,241	13
35	Kashechewan Power Corporation	0	358,436	0	155,966	0
36	Kenora Hydro Electric Corporation Ltd.	124,005	220,150	56	1,407,448	9
37	Kingston Hydro Corporation	584,540	1,716,251	34	8,674,286	7
38	Kitchener-Wilmot Hydro Inc.	1,754,249	4,634,072	38	27,710,719	6
39	Lakefront Utilities Inc.	265,025	511,744	52	3,077,834	9
40	Lakeland Power Distribution Ltd.	433,380	511,364	85	4,142,391	10
41	London Hydro Inc.	10,839,260	10,660,376	102	51,192,690	21
42	Midland Power Utility Corporation	345,045	432,694	80	2,739,690	13
43	Milton Hydro Distribution Inc.	1,604,921	2,205,823	73	11,911,927	13
44	Newmarket-Tay Power Distribution Ltd.	1,060,792	1,842,766	58	9,649,555	11
45	Niagara Peninsula Energy Inc.	2,357,811	2,378,879	99	19,056,865	12
46	Niagara-on-the-Lake Hydro Inc.	424,921	828,092	51	2,993,633	14
47	North Bay Hydro Distribution Limited	740,425	992,259	75	5,545,424	13
48	Northern Ontario Wires Inc.	162,339	212,627	76	1,174,934	14
49	Oakville Hydro Electricity Distribution Inc.	3,198,065	4,742,101	67	24,575,982	13
50	Orangeville Hydro Limited	229,432	412,100	56	3,705,603	6
51	Orillia Power Distribution Corporation	622,730	831,580	75	4,318,856	14
52	Oshawa PUC Networks Inc.	1,999,382	3,504,522	57	19,963,922	10
53	Ottawa River Power Corporation	353,106	366,122	96	2,282,373	15
54	Peterborough Distribution Incorporated	890,212	4,697,210	19	9,781,455	9
55	PowerStream Inc.	24,050,021	34,058,295	71	140,696,240	17
56	PUC Distribution Inc.	787,822	1,346,637	59	7,440,107	11
57	Renfrew Hydro Inc.	90,283	178,092	51	1,070,574	8
58	Rideau St. Lawrence Distribution Inc.	124,517	217,038	57	1,306,239	10
59	Sioux Lookout Hydro Inc.	61,605	128,512	48	1,016,095	6
60	St. Thomas Energy Inc.	605,138	850,507	71	4,643,532	13
61	Thunder Bay Hydro Electricity Distribution Inc.	2,644,365	2,885,599	92	12,927,445	20
62	Tilsonburg Hydro Inc.	281,343	167,576	168	2,881,461	10
63	Toronto Hydro-Electric System Limited	50,864,212	72,960,069	70	400,296,506	13
64	Veridian Connections Inc.	4,522,099	5,203,645	87	40,482,340	11
65	Wasaga Distribution Inc.	176,877	232,600	76	1,814,647	10
66	Waterloo North Hydro Inc.	1,816,067	3,185,447	57	21,192,868	9
67	Welland Hydro-Electric System Corp.	734,389	1,108,547	66	6,584,437	11
68	Wellington North Power Inc.	141,935	236,870	60	1,493,412	10
69	West Coast Huron Energy Inc.	169,605	240,844	70	2,012,404	8
70	Westario Power Inc.	553,926	1,152,485	48	6,101,269	9
71	Whitby Hydro Electric Corporation	1,740,399	811,391	214	15,860,460	11
Independent Electricity System Operator		n/a	0	n/a	0	n/a
<b>Total</b>		<b>230,266,298</b>	<b>353,772,247</b>	<b>65</b>	<b>1,835,264,933</b>	<b>13</b>

## 2.11 - LDC RESULTS - COST-EFFECTIVENESS

Table 17 details each LDC's CDM program cost-effectiveness test results for the 2016 program year.

Cost-Effectiveness Test Results attributed to the IESO are a result of conservation program participation in centrally delivered conservation programs in the service territories of LDCs that do not deliver such programs.

**Table 17: LDC Results - Cost Effectiveness**

#	LDC	Total Resource Cost Test		Program Administrator Cost Test		Levelized Unit Energy Cost (¢/kWh)
		Net Benefit (\$M)	Net Benefit Ratio	Net Benefit (\$M)	Net Benefit Ratio	
1	Algoma Power Inc.	0.73	5.14	16.18	1.86	3.36
2	Atikokan Hydro Inc.	0.11	5.47	0.11	2.20	2.96
3	Attawapiskat Power Corporation	0.07	-2.52	0.58	6.24	0.93
4	Bluewater Power Distribution Corporation	2.42	2.46	17.57	2.00	3.20
5	Brantford Power Inc.	0.97	1.19	80.19	2.57	2.59
6	Burlington Hydro Inc.	6.45	3.42	19.82	2.57	2.75
7	Canadian Niagara Power Inc.	-0.25	0.94	1.03	2.29	2.99
8	Centre Wellington Hydro Ltd.	0.64	2.19	0.04	2.69	2.56
9	Chapleau Public Utilities Corporation	0.15	-8.21	0.21	4.70	1.32
10	COLLUS PowerStream Corp.	1.14	3.72	1.20	2.00	3.17
11	Cooperative Hydro Embrun Inc.	0.24	2.35	6.65	2.80	1.98

#	LDC	Total Resource Cost Test		Program Administrator Cost Test		Levelized Unit Energy Cost (¢/kWh)
		Net Benefit (\$M)	Net Benefit Ratio	Net Benefit (\$M)	Net Benefit Ratio	
12	E.L.K. Energy Inc.	1.02	2.92	0.51	2.30	2.84
13	Energy+ Inc.	5.63	2.22	1.09	2.43	2.83
14	Enersource Hydro Mississauga Inc.	24.70	1.71	8.29	5.49	1.24
15	Entegrus Powerlines Inc.	3.45	1.73	1.13	2.74	2.23
16	EnWin Utilities Ltd.	9.14	1.78	2.26	3.03	2.08
17	Erie Thames Powerlines Corporation	1.39	3.89	3.48	2.38	2.80
18	Espanola Regional Hydro Distribution Corporation	0.28	-11.11	3.70	3.04	2.03
19	Essex Powerlines Corporation	1.67	1.56	1.24	2.28	2.67
20	Festival Hydro Inc.	2.69	1.96	1.55	3.93	1.75
21	Fort Albany Power Corporation	0.04	-2.51	0.36	6.24	0.93
22	Fort Frances Power Corporation	0.41	-24.20	5.38	2.88	2.11
23	Greater Sudbury Hydro Inc.	5.07	3.87	0.94	3.27	2.04
24	Grimsby Power Incorporated	1.21	4.50	0.48	3.64	1.86
25	Guelph Hydro Electric Systems Inc.	4.74	3.83	4.98	3.12	2.29
26	Halton Hills Hydro Inc.	1.65	2.26	0.55	2.27	2.66
27	Hearst Power Distribution Company Limited	1.33	5.66	1.83	8.44	0.79
28	Horizon Utilities Corporation	17.28	2.08	38.93	2.27	3.04
29	Hydro 2000 Inc.	0.19	-21.98	3.22	3.30	1.82
30	Hydro Hawkesbury Inc.	0.79	10.21	0.21	3.61	1.70
31	Hydro One Brampton Networks Inc.	17.97	2.19	0.21	2.52	2.93
32	Hydro One Networks Inc.	128.93	6.22	0.25	2.49	2.63
33	Hydro Ottawa Limited	25.04	2.63	2.00	2.34	2.86
34	InnPower Corporation	1.51	5.32	2.21	2.64	2.49
35	Kashechewan Power Corporation	0.08	-2.52	63.49	6.24	0.93
36	Kenora Hydro Electric Corporation Ltd.	0.39	-30.92	104.70	2.54	2.39
37	Kingston Hydro Corporation	1.39	2.95	6.17	2.83	2.47
38	Kitchener-Wilmot Hydro Inc.	6.43	2.29	0.54	2.90	2.45
39	Lakefront Utilities Inc.	0.63	3.50	4.63	2.82	2.47
40	Lakeland Power Distribution Ltd.	1.36	2.99	1.11	2.98	2.31
41	London Hydro Inc.	10.09	1.93	0.21	1.79	3.53
42	Midland Power Utility Corporation	1.28	3.59	0.28	3.52	1.87
43	Milton Hydro Distribution Inc.	1.35	1.41	1.00	2.19	3.22
44	Newmarket-Tay Power Distribution Ltd.	4.20	3.68	4.09	3.57	2.82
45	Niagara Peninsula Energy Inc.	3.40	1.83	16.18	2.30	2.92
46	Niagara-on-the-Lake Hydro Inc.	0.87	1.88	0.11	3.44	2.11
47	North Bay Hydro Distribution Limited	2.25	6.01	0.58	2.82	2.13
48	Northern Ontario Wires Inc.	0.48	5.74	17.57	3.08	2.01
49	Oakville Hydro Electricity Distribution Inc.	8.50	3.64	80.19	2.09	3.32
50	Orangeville Hydro Limited	1.69	-15.93	19.82	3.04	2.12
51	Orillia Power Distribution Corporation	0.76	2.38	1.03	1.70	3.85
52	Oshawa PUC Networks Inc.	7.71	11.39	0.04	2.99	2.20
53	Ottawa River Power Corporation	0.43	1.71	0.21	2.37	2.48
54	Peterborough Distribution Incorporated	2.64	3.86	1.20	2.38	2.82
55	PowerStream Inc.	35.46	1.91	6.65	2.48	2.83
56	PUC Distribution Inc.	3.02	2.40	0.51	3.07	1.85
57	Renfrew Hydro Inc.	0.20	2.07	1.09	2.57	3.00
58	Rideau St. Lawrence Distribution Inc.	0.28	3.49	8.29	2.43	2.62
59	Sioux Lookout Hydro Inc.	0.41	-20.68	1.13	3.84	1.71
60	St. Thomas Energy Inc.	1.80	2.44	2.26	3.49	2.04
61	Thunder Bay Hydro Electricity Distribution Inc.	3.55	3.44	3.48	1.97	3.20
62	Tillsonburg Hydro Inc.	0.53	20.72	0.29	2.52	2.62
63	Toronto Hydro-Electric System Limited	90.25	1.91	1.24	2.76	2.55
64	Veridian Connections Inc.	8.39	2.51	1.55	2.11	3.31
65	Wasaga Distribution Inc.	0.82	11.45	0.36	3.07	2.16
66	Waterloo North Hydro Inc.	5.28	2.97	5.38	2.84	2.48
67	Welland Hydro-Electric System Corp.	1.04	1.91	0.94	2.29	2.79
68	Wellington North Power Inc.	0.26	2.69	0.48	2.35	3.02
69	West Coast Huron Energy Inc.	0.26	1.94	4.98	2.44	2.70
70	Westario Power Inc.	1.93	3.46	0.55	2.06	3.07
71	Whitby Hydro Electric Corporation	5.48	4.35	1.83	2.79	2.21
Independent Electricity System Operator		-0.002	0.19	-0.02	0.02	2.72
<b>Total</b>		<b>515</b>	<b>2.25</b>	<b>514</b>	<b>3.43</b>	<b>2.10</b>

### 3 - Summary

In the first two years of the CFF, LDCs achieved 38% (2,644 GWh) of their 7,000 GWh target while spending 13% (\$ 230.3 million) of their \$ 1.835 billion budget. Of the results to date, 44% were achieved in 2016, 42% were achieved in 2015 as of the 2015 verified results and a further 14% were achieved in 2015 as a result of 2016 adjustments (as a result of late reporting). Based on further preliminary results reporting thus far in 2017, it is expected that even greater savings have been achieved in 2015 and 2016 which will be verified in future annual program evaluations. As a result, LDCs are tracking well to meet or exceed the CFF target while spending less than their allocated CFF budget.

On a program level basis, the majority of savings in 2016 were achieved by just the Save on Energy Retrofit Program (49%) and the Save on Energy Coupon Program (37%). The Save on Energy Coupon Program and the Save on Energy Heating & Cooling Program were the only programs to achieve greater savings in 2016 than in the previous year, while all other programs experienced performance declines. Some of the declines (in savings and/or participation) are a result LDCs transitioning to a new framework and the time required to ramp-up activity for programs that were relaunched (all) or re-designed such as the Save on Energy Small Business Program. Further, the Save on Energy Process & Systems Upgrades Program (PSUP) has long lead time, which results in delays in realizing savings. The program is expected to deliver much higher results as more projects which were completed in 2016 are starting to deliver savings. In terms of LDC local programs and pilot programs, 2017 is expected to bring greater savings as a whole as such programs launched since 2015 have achieved sufficient participation and savings to enable a savings verification process.

At the LDC level, two LDCs have already achieved their CFF target while 2 other LDCs have achieved at least 90% of their target and all LDCs except for 4 have achieved at least 20% of their target. 3 LDCs located in remote areas of the province are expected to achieve their initial CFF savings in future years as program activity is accumulated and energy efficient equipment is transported during limited annual transport seasons. Spending-wise, all LDCs have spent lesser than 24% of their 6 year budget, with the median LDC spending 11% of their budget. Further, in 2016 all LDCs achieved the necessary cost effectiveness test result thresholds outlined in the Energy Conservation Agreement. Overall portfolio level cost effectiveness test results came in lower than in 2015 primarily as a result of the Save on Energy Coupon Program.

Overall LDCs are on track to meet or exceed the CFF target while spending less than budgeted, but continued success in the CFF will be dependent on improvement in most programs as continued outperformance of a few programs cannot be perennially expected.

## Appendix A - Endnotes

- 1) **Ministerial Directives from the Minister of Energy of Ontario to the Independent Electricity System Operator from 2015 to Present:**  
<http://www.ieso.ca/corporate-ieso/ministerial-directives/>
- 2) **Ministerial Directives from the Minister of Energy of Ontario to the Independent Electricity System Operator or predecessor Ontario Power Authority prior to 2015:**  
<http://ieso.ca/en/document-library/search-results?q=&pi=0&c=3B09226D-D2B0-4F9D-BFB4-F3B004A1154C&a=false>
- 3) **2015 - 2020 Conservation First Framework Overview:**  
<http://ieso.ca/en/sector-participants/conservation-delivery-and-tools/conservation-first-framework/>
- 4) **Conservation First Framework Local Distribution Company Toolkit including:**
  - a) IESO Central Services Strategy and Rate Guideline;
  - b) IESO Evaluation, Measurement and Verification Protocols and Requirements;
  - c) Local Distribution Company Collaboration Fund Application and Funding Guideline;
  - d) Local Distribution Company Program Innovation Guideline; and
  - e) Local Distribution Company Target and Budget Allocation Methodology;<http://ieso.ca/sector-participants/conservation-delivery-and-tools/ldc-toolkit/>
- 5) **Independent Electricity System Operator Conservation Fund Overview:**  
<http://www.ieso.ca/get-involved/funding-programs/conservation-fund/cf-overview/>
- 6) **Independent Electricity System Operator Evaluation, Measurement and Verification Protocol:**  
<http://www.ieso.ca/-/media/files/ieso/document-library/conservation/emv/2015/ieso-em-v-protocols-and-requirements.pdf?la=en>
- 7) **Conservation and Demand Management Program Evaluation, Measurement & Verification Reports:**  
<http://ieso.ca/en/sector-participants/conservation-delivery-and-tools/evaluation-measurement-and-verification/>
- 8) **Ontario Energy Board Conservation and Demand Management Report - 2015 Results:**  
<http://www.ontarioenergyboard.ca/oeb/ Documents/CDM/OEB 2015 CDM Results Report.pdf>
- 9) **2015 Annual Verified Local Distribution Company Conservation & Demand Management Program Results Report:**  
<https://www.oeb.ca/oeb/ Documents/CDM/IESO 2015 LDC CDM Program Results Report.pdf>

- 10) **Other Historical Annual and Quarterly Conservation and Demand Management Program Results Reports:**  
<http://ieso.ca/en/power-data/conservation-overview/conservation-reports/>
- 11) **Conservation First Framework Local Distribution Company Conservation and Demand Management Plans:**  
<http://ieso.ca/en/sector-participants/conservation-delivery-and-tools/cdm-plans/>
- 12) **Comprehensive Local Distribution Company Results Reports:**  
<http://ieso.ca/en/sector-participants/conservation-delivery-and-tools/conservation-targets-and-results/>
- 13) **Conservation and Demand Management Program Descriptions & Eligibility:**  
<https://saveonenergy.ca/>
- 14) **Conservation and Demand Management Program Rules, Descriptions and Eligibility:**  
<http://ieso.ca/en/sector-participants/conservation-delivery-and-tools/provincial-regional-and-local-program-rules/>

## Appendix B - Reporting Glossary

“**2011-2014+2015 Extension Legacy Framework Programs**” means programs in market from 2011-2015 resulting from the April 23, 2010 GEA CDM Ministerial Directive and funded separately from 2015-2020 Conservation First Framework Programs but whose savings in 2015 are attributed towards the 2015-2020 Conservation First Framework target.

“**2015-2020 Conservation First Framework Programs**” means programs in market from 2015-2020 resulting from the March 31, 2014 CFF Ministerial Directive and funded separately from 2011-2014+2015 Extension Legacy Framework Programs.

“**Activity**” means the number of projects.

“**Actual**” means the IESO-determined final results of activity, savings, expenditures and cost effectiveness.

“**Administrative Expenses**” means costs incurred in the delivery of a program related to labour, marketing, third-party expenses, value added services or other central services.

“**Allocated Budget**” means each LDC's assigned portion of the Province's \$ 1.835 billion CDM Plan Budget of the 2015-2020 Conservation First Framework.

“**Allocated Target**” means each LDC's assigned portion of the Province's 7 TWh Net 2020 Annual Energy Savings Target of the 2015-2020 Conservation First Framework.

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

“**Demand Savings**” means demand savings attributable to conservation and demand management activities.

“**End-User Level**” means resource savings in this report are measured at the customer level as opposed to the generator level (the difference being transmission and distribution losses).

“**Energy Savings**” means energy savings attributable to conservation and demand management activities.

“**First Year Savings**” means the peak demand or energy savings that occur in the year it was achieved (includes resource savings from only new program activity).

“**Forecast**” means an LDC's forecast of activity, savings, expenditures and cost effectiveness as indicated in each LDC's submitted CDM Plan Cost Effectiveness Tools.

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

**“Full Cost Recovery Progress”** means for a given year, the percentage calculated by dividing: a) the sum of verified electricity savings for all years of the term up to and including the applicable year for all Programs that receive full cost recovery funding, by b) the Cumulative FCR Milestone, multiplied by 100%, as specified in Schedule A of the Energy Conservation Agreement.

**“Gross Savings”** means savings determined as either: 1) program activity multiplied by per unit savings assumptions for prescriptive programs; or 2) reported savings multiplied by the realization rate for engineered or custom program streams.

**“IESO Value Added Service Provider”** means an IESO managed program delivery agent for achieving cost efficiencies, whose cost is then invoiced to LDCs. Currently the Save on Energy Coupon Program and the Save on Energy Heating & Cooling Program have Value Added Service Providers for retailer and contractor specialist services and payment fulfilment services.

**“Incremental Savings”** means the new resource savings attributable to activity procured in a particular reporting period based on when the savings are considered to 'start'.

**“Initiative”** means a conservation and demand management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup) from the 2011-2014+2015 Extension Legacy Framework.

**“Local Program”** means programs designed by LDCs to serve their communities and approved by the IESO.

**“Net Savings”** means the peak demand or energy savings attributable to conservation and demand management activities net of free-riders, etc.

**“Net-to-Gross Adjustment”** means the ratio of net savings to gross savings, which takes into account factors such as free-ridership and spillover.

**“Participant Incentives”** means costs incurred in the delivery of a program related to incenting participants to perform peak demand or energy savings.

**“Pilot Program”** means a program pilot that may achieve energy or demand savings and is funded extraneous to an LDC's CDM Plan Budget.

**“Program”** means a conservation and demand management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup) from the 2015-2020 Conservation First Framework.

**“Progress”** means a comparison of Actuals versus Forecasts.

**“Province-Wide Program”** means programs available to all LDCs to deliver and that are consistent across the province.

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

**“Regional Program”** means programs designed by LDCs to serve their region and approved by the IESO.

**“Reported Savings”** means savings determined by the LDC: 1) for prescriptive projects/programs: calculating quantity x prescriptive savings assumptions; and 2) for engineered or custom program projects/programs; calculated using prescribed methodologies.

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

**“Total Expenditure”** means the sum of Administrative Expenses and Participant Incentives

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

**“Verified Savings”** means savings determined by the IESO's evaluation, measurement and verification that may adjust reported savings by the realization rate.