

2011-2014 OPA-Contracted Province-Wide CDM Programs

October 2010

Consumer Program Summary Guide



Introduction

Welcome to the Program Guide to the Consumer (Residential) Program (the Program). This Guide provides a summary overview of the Program features for 2011, including:

1. Program Objectives
2. Provincial Targets for the Program
3. Description of the Initiatives under the Program:
 - a. Appliance Retirement/Exchange Events
 - b. Instant Discounts (Rebates)
 - c. HVAC Discounts (Rebates)
 - d. Demand Response
 - e. Midstream Incentives
 - f. New Construction
4. Key Changes to Program Initiatives for 2011
5. LDC and OPA Roles and Responsibilities Chart
6. Glossary

Table of Contents

Introduction	1
1. Program Objectives	1
2. Program Targets	2
3. Description of Program Initiatives	4
Appliance Retirement/Exchange Events	4
Instant Discounts (Rebates)	5
HVAC Discounts (Rebates)	5
Demand Response	6
Midstream Incentives	6
New Construction	6
Enabling Tools	7
4. Key Changes to the Program Initiatives for 2011	9
5. LDC and OPA Roles and Responsibilities	16
6. Glossary	19

1. Program Objectives

The Green Energy Act (GEA) introduced significant changes to Ontario's electricity conservation landscape, including mandatory four year conservation targets for all LDCs. The Program for 2011 was designed to be cost effective at the portfolio level while supporting LDCs' achievement of demand reduction and energy savings targets for 2011-2014.

The objectives of the Program are to:

- Help consumers improve the energy efficiency of their homes.
- Empower consumers by giving them information (consumption and price) to help them better manage their electricity use.
- Allow the IESO/LDCs to manage consumer demand to meet overall distribution system needs.

To maximize participation, the Program provides energy efficiency opportunities for multiple areas of the home and demonstrates to consumers how they are interconnected.

This new direction means the marketing is moving from initiative-based to a consumer-centric approach that builds on awareness and fact-based education. This will help the consumer make comprehensive choices for energy-efficiency at home, which will contribute to a culture of conservation.

The intent of the Program is to create conditions that help homes become efficient, smart, and integrated.

- Efficient – in terms of equipment and building envelope, including new, more efficient technologies, proper sizing and installation of equipment, and efficient use of equipment.
- Smart – in terms of effective management of electricity in homes, using price signals with load control devices or systems ranging from simple switched sockets to smart home grids.
- Integrated – in terms of reducing electricity use and other forms of energy, through home design and new and innovative ways to use energy in the home.

Measures included in the Program were selected because they offer an opportunity to realize the highest possible potential for savings. The majority of the measures, with the exception of pool measures, set-top boxes, and select components of the residential new construction initiative, have been offered in the past and demonstrate continued market potential.

Enabling initiatives, including an on-line audit tool, are being introduced that:

- will allow consumers to analyze their consumption free of charge,
- help consumers identify opportunities to save, and
- will provide information about the incentives available under the Program.

Marketing is central to the delivery of the Program. LDCs' local marketing campaigns will be supported by provincial air cover.

2. Program Targets

Consumer Sector Statistics

The consumer sector represents about 4.5 million existing homes, 3.4 million of which are single family homes. The consumer sector contributes about 30% of the Province's total electrical consumption.

Demand Response

This is a re-design of *peaksaver*[®], the residential demand response initiative. Existing program features will continue to be offered through June 30, 2011 pursuant to existing agreements between the OPA and participating LDCs. The OPA and the Residential Demand Response Work Group are currently conducting pilot projects to test new technologies for use in the future province wide residential demand response initiative with an anticipated start of July 1, 2011. Further details will be provided at the conclusion of pilot in December 2010. The initiative has been designed to include two options available to consumers:

- **Option A: Participation with Demand Response** – under this option, four end-uses will be eligible for load control participation:
 - central air conditioners
 - electric water heaters
 - room air conditioners
 - pool pumps

Participants will get load control devices (Home Energy Interface (HEI)) installed free and they will have access to real time consumption and price information. This information can be accessed on an in-home device (IHD) or on-line, depending on the customer's choice.

When developed, a Dashboard will also be available under Option A. A Dashboard is a single device that includes load control capabilities and IHD. Consumers will receive subsidized Dashboards.

- **Option B: Participation without Demand Response** – under this option, customers have the opportunity to access price and real-time consumption information. Participants get a subsidized amount toward a HEI and can opt for an IHD or on-line display.

Mid-Stream Incentives

This is a carry over and enhancement of the midstream television incentive from the Power Savings Event. In addition to providing incentives for retailers to promote energy efficient televisions, it will include incentives for satellite and cable providers to use high-efficiency set-top boxes and network configurations. It will also include pool pumps, providing contractors with incentives to install “right sized” pool equipment. Savings from the midstream initiatives will be proportionally allocated to LDCs based on the size of their residential customer base.

New Construction

This is a new initiative. It includes incentives for builders to construct new, single family homes that include energy efficiency standards that are above current building codes. It includes incentives for:

- Prescriptive measures:

[®] Trademark from Toronto Hydro. Used under license.

- “All-off” Switches
- ECM Motors
- SEER 15 CAC
- Lighting Control Products
- Energy Efficient Lighting Fixtures
- Residential Demand Responses Devices (subject to results of the pilots)
- Custom Projects (incentive will be based on a per \$/kW or per \$/KWh subject to eligibility criteria) (i.e. solar hot water heating where it can be demonstrated as a cost-effective measure)
- Performance Incentives:
 - EnerGuide 83
 - EnerGuide 85
- Enabling Initiatives:
 - Training on Energy Efficiency Building Techniques and Practices
 - Consumer Education (no incentives)

The initiative will be delivered by LDCs, including local marketing, approvals, data collection, and reporting. LDCs will also be responsible for local engagement of builders, with support from OPA air cover driving builders to their LDCs for additional information (possible air cover options include trade publications, Home Builders Associations etc.). The OPA will be responsible for payments, as well as enabling initiatives including builder training and consumer education.

Enabling Tools

In addition to the specific Initiatives, another important feature of the Program are Enabling Tools aimed at consumers and industry.

➤ **Consumer-focused Enabling Tools**

Education

- Web-based material
- Information integrated into marketing materials
- Cross-promotion of initiatives

Audit Tool

- New, on-line home audit tool that examines energy use, including electricity and gas
- Tool will have robust education component
- LDCs will be able to host the audit tool on their website through an interface

➤ **Industry-focused Enabling Tools**

HVAC Quality Installation

- When installing rebated HVAC measures, quality installation metrics will be required
- Opportunities for a quality installation certification program will be investigated, including the possible provision of incentives for industry training

Mid-stream

- Cross-promoting of initiatives whenever there is an interaction with the consumer

Capability Building

The Program includes a number of supply chain capability initiatives.

➤ HVAC Contractor Capability Building

This focuses on quality installation in the HVAC industry to ensure the efficiency designed into products are not jeopardized by the installation. This will be achieved by:

- implementing a quality installation standard
- a training program for existing technicians
- influencing apprenticeship and journeyperson training

➤ Builder Training

This training will focus on “building in” energy efficiency and green attributes to new homes. Currently 15-20% of the builders already build to higher levels of energy efficiency but the aim is to increase the penetration beyond the 20%.

Marketing

A province-wide marketing strategy will provide an integrated campaign for all sectors tailored to the appropriate marketing vehicle. The marketing approach will evolve from fragmented program advertising to a customer-centric strategy that moves the focus from the end-use to the end-user.

A new conservation icon (Trustmark) is being developed and will be consistently embedded in all conservation messaging with the aim of becoming a “seal of trust and approval” for consumers and businesses alike.

The OPA will provide province-wide air cover to support the LDCs in delivery of the Program. The OPA will also provide LDCs with a versatile marketing toolkit for development of local marketing materials (bill inserts, posters, website content, call center transcripts, etc.). As well, there will be a central website that will present the province-wide programs. The figure below depicts the customer-centric perspective of the conservation universe.

LDCs will take the central role in managing the relationship with their customers so LDCs will decide how much marketing is needed to deliver certain elements of the province-wide programs and will have to manage all local marketing tools, subject to marketing guidelines established by the OPA.

The figure below depicts the customer-centric perspective of the conservation universe:



5. Glossary

The following definitions and abbreviations relate to the Program.

AMI – advance metering interface

CAC – central air conditioner

CFL – compact florescent lights

DR – demand reduction

ECM – electronically commutated motors

EnerGuide Rating System – a label-neutral rating system regulated by Natural Resources Canada

EWH – electric water heater

HEI – home energy interface

IESO – Independent Electricity System Operator

IHD – in-home display

PCT – programmable communicating thermostat

PP – pool pump

SEER – Seasonal Energy Efficiency Ratio

TOU – time of use

UDR – utility demand reduction

WAC – window air conditioner