



ONTARIO POWER AUTHORITY



# A Progress Report on Electricity Conservation 2007

April 2008

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## Introduction

The Government of Ontario has set a goal of achieving 6,300 megawatts (MW) of savings in peak electricity use in Ontario by 2025, which includes interim targets of 1,350 MW reduction in peak demand by 2007 and a further 1,350 MW by 2010. One of the Ontario Power Authority's (OPA) five strategic objectives is to contribute to the achievement of this goal.

The OPA has a three-pronged strategy for long-term conservation: procuring conservation resources to meet the 2007 and 2010 MW savings targets; building and enhancing capabilities in the conservation services sector; and encouraging a culture of conservation among electricity consumers. This report focuses on conservation procurement. Select conservation awareness activities are also highlighted.

The OPA procures conservation resources through programs that deliver energy savings, demand reduction and conservation awareness. Some programs are designed to achieve all three outcomes while others focus on one or two. The programs use tools as diverse as product rebates, building retrofits and direct installation services to encourage participants to undertake one or more of the following types of electricity conservation:

- **Conservation behaviour/demand management:** reducing or shifting electricity demand (e.g., turning off lights, load shifting)
- **Energy efficiency:** using technologies that provide same level of service but use less energy (e.g., compact fluorescent light bulbs)
- **Fuel switching:** switching from electricity to another fuel for a given application (e.g., electric water heater to gas water heater)
- **Customer-based generation:** reduced demand for electricity from the grid, due to on-site generation (e.g., solar photovoltaic panels).

The OPA uses a “portfolio approach” in planning its conservation programs. Individual programs are developed so that the portfolio as a whole provides a comprehensive, cost-effective and wide-reaching slate of conservation programs for Ontario.

## About this report

These progress reports will be prepared quarterly to provide updates on the portfolio of electricity conservation initiatives managed by the OPA.

This report provides a summary of the OPA's portfolio of programs in 2007. The results<sup>1</sup> are calculated based on:

- (a) estimated energy savings per participant and other program input assumptions<sup>2</sup>
- (b) reported participation activity.

As part of its measurement and verification (M&V) framework, the OPA undertakes independent evaluation of its conservation programs to verify the energy savings and the program impact. M&V of 2007 programs is currently underway, and the verified savings will be made public as they become available. The Demand Response 1 (DR1) program is the exception, as the savings reported here have already been verified by a third-party M&V consultant.

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<sup>1</sup> Unless otherwise noted, program activity units (participants, coupons, etc.), energy savings and demand reductions reported here are gross results that capture 100 percent of program participants. As part of the measurement and verification (M&V) process for each program, the net results will be calculated through an assessment of the program's free ridership. Free riders are program participants who would have undertaken the promoted conservation activity on their own initiative even without the program.

<sup>2</sup> Examples of assumptions include the energy-savings measure's effective useful life, the measure's seasonal energy-savings pattern, and program free ridership. These program input assumptions are estimated based on the best information available during program design.

## Portfolio Results Summary

Reported results for the OPA's 2007 conservation program portfolio are summarized below, followed by sector and program level results in subsequent sections.

**Table 1 -- Portfolio reported results summary**

|                                            | <b>Mass Market</b> | <b>Commercial/ Institutional</b> | <b>Industrial</b> | <b>Total</b> |
|--------------------------------------------|--------------------|----------------------------------|-------------------|--------------|
| Programs in market                         | 6                  | 6                                | 2                 | 14           |
| Summer peak demand savings (MW)            | 130.2              | 149.2                            | 317.4             | 596.8        |
| Annual energy savings (GWh)                | 518.6              | 207.6                            | N/A               | 726.2        |
| Lifetime <sup>3</sup> energy savings (GWh) | 2,251              | 1,175.4                          | N/A               | 3,426.4      |

### Conservation highlights – 2007

- Launched 14 conservation programs for all types of electricity customers: residential, commercial, institutional, industrial and agricultural.
- Worked with 77 local distribution companies for the delivery of three province-wide programs -- Summer Savings, The Great Refrigerator Roundup and **peaksaver®** -- which reached 99 percent of Ontarians.
- Raised awareness and engaged consumer participation through our conservation programs. Market research results showed that more than 80 percent of Ontarians said they were aware of the OPA's conservation programs, and more than 50 percent said they had participated in at least one program.
- The Conservation Fund provided \$3.14 million in funding for 15 projects, valued at \$8.2 million, targeting the forestry products, residential, healthcare and education sectors, to name a few.
- The Technology Development Fund provided just over \$650,000 to 10 projects, with more than \$11 million in leveraged external contributions.

<sup>3</sup> Lifetime energy savings are the estimated total amount of energy that will be saved over the life of the specific conservation technology or action promoted in the program. For example, if a compact fluorescent light bulb saves 44 kilowatt-hours (kWh) per year and lasts for six years, it will save 264 kWh over its lifetime.

## Mass Market Highlights

In 2007, the OPA had six mass market programs in market. The reported results for these programs are summarized below.

**Table 2 -- Mass Market Programs -- 2007 reported results**

| Program Name                                                           | Activity measure | Activity units | Summer peak demand savings (MW) | Energy savings (GWh) |                |
|------------------------------------------------------------------------|------------------|----------------|---------------------------------|----------------------|----------------|
|                                                                        |                  |                |                                 | Annual               | Lifetime       |
| Cool Savings/Hot Savings                                               | Units            | 99,746         | 30.2                            | 33.2                 | 428.6          |
| Every Kilowatt Counts                                                  | Coupons          | 2,276,424      | 7.8                             | 196.7                | 1,239.5        |
| Energy Efficiency and Conservation Measures for Aboriginal Communities | Kits             | 23,000         | 1.0                             | 20.7                 | 62.1           |
|                                                                        | Communities      | 100            |                                 |                      |                |
| Great Refrigerator Roundup                                             | Appliances       | 49,769         | 11.4                            | 50.5                 | 303.3          |
| <i>peaksaver</i> ®                                                     | Participants     | 27,264         | 14.8                            | 0                    | 0              |
| Summer Savings                                                         | Customers        | 823,622        | 65.0                            | 217.5                | 217.5          |
| <b>TOTAL</b>                                                           |                  |                | <b>130.2</b>                    | <b>518.6</b>         | <b>2,251.0</b> |

Key milestones and highlights of the mass market conservation programs are detailed below. Complete descriptions of all programs and samples of marketing materials are provided in the appendix.

### LDC programs

2007 was the first year that the OPA contracted with local distribution companies (LDCs) province-wide, providing them with funding to deliver conservation programs across Ontario. Extensive consultations and negotiations led to contractual relationships with 77 (out of 86) electricity LDCs. Ninety-nine percent of LDC customers in the province had access to at least one program.

The three residential programs launched and delivered with the assistance of the LDCs contributed an estimated total of **91.2 MW of summer peak demand savings** and **268 gigawatt-hours (GWh) of annual energy savings**, or approximately **15 percent** of the reported demand and **37 percent** of reported energy savings of the OPA's entire 2007 conservation program portfolio.



Launched in June 2007, the **Great Refrigerator Roundup** program aims to achieve energy and demand savings through the removal and decommissioning of older, working, inefficient secondary and primary refrigerators, freezers and air conditioners. Seventy-five LDCs participated making it accessible to 99 percent of Ontarians.

The **Summer Savings** program provided customers with a 10 percent bill credit if they reduced their electricity consumption during the program period (July 1 - August 31) by 10 percent or more compared to the same period in the previous year. With 70 participating LDCs, 97 percent of Ontarians had access to this program.



In the **peaksaver®** program, LDCs install either programmable thermostats or load control devices on central air conditioners (and electric water heaters where applicable) of eligible customers who volunteer to participate in the program. During high electricity demand periods, the devices are remotely activated to reduce air conditioner/water heater operation for short periods, leading to an overall reduction in demand. Fifty-two summer-peaking LDCs, representing 92 percent coverage of Ontario residential customers, participated in the program.

## Energy Conservation Kits for First Nations Communities

A major component of the 2007 Energy Efficiency and Conservation Measures for Aboriginal Communities Program was the procurement and delivery of free, energy conservation kits to Ontario's First Nations communities. The kits were made available to all First Nations communities, and most (about 120) elected to participate in the program. More than 23,000 kits were distributed in total, with members within each community delivering the kits to individual households on behalf of the program.



The kit included easy-to-install products to support energy conservation efforts at home:

- four compact fluorescent light bulbs (CFLs)
- a fridge/freezer thermometer
- pipe wrap
- a faucet aerator
- a low-flow showerhead
- a shower flow measuring bag
- an outdoor heavy-duty timer
- electrical outlet and switch gaskets
- weather stripping
- storm window kits.

The kits also included a four-language (English, Ojibway, Cree, Oji-Cree) product guide that explained how each product saves energy and how to use them properly.

## Commercial/ Institutional Highlights

In 2007, the OPA had six commercial/institutional programs in market. The reported results for these programs are summarized below.

**Table 3 -- Commercial/Institutional Programs 2007 results**

|                                                 | Activity measure             | Activity units | Summer peak demand savings (MW) | Annual energy savings (GWh) | Lifetime energy savings (GWh) |
|-------------------------------------------------|------------------------------|----------------|---------------------------------|-----------------------------|-------------------------------|
| Affordable Housing                              | Housing units                | 855            | 0.3                             | 4.3                         | 60.5                          |
| Social Housing                                  | Housing units                | 9,680          | 1.4                             | 11.9                        | 120.5                         |
| Energy Efficiency Assistance for Houses – Pilot | Houses                       | 544            | 0.5                             | 2.3                         | 44.8                          |
| Toronto Comprehensive                           | Custom projects              | 36             | 145                             | 184.1                       | 924.7                         |
| Electricity Retrofit Incentive                  | Projects                     | N/A            | 2.0                             | 5.0                         | 24.9                          |
| Agricultural Energy Efficiency                  | <i>See description below</i> |                |                                 |                             |                               |
| <b>TOTAL</b>                                    |                              |                | <b>149.2</b>                    | <b>207.6</b>                | <b>1,175.4</b>                |

Key milestones and highlights of the commercial and institutional conservation programs are detailed below. Complete descriptions of all programs and samples of marketing materials are provided in the appendix.

### Toronto Comprehensive Program

The OPA has been directed by the Minister of Energy to procure 300 MW of demand reduction within the City of Toronto by 2010. The Toronto Comprehensive program includes custom energy efficiency (retrofit and new construction) projects for all sectors delivered in Toronto by the Building Owners and Managers Association (BOMA) of Greater Toronto, the City of Toronto and Toronto Hydro. In 2007, all three delivery agents launched their respective program components such that all commercial, industrial and institutional buildings in the City had access to the program. Approximately 40 projects were underway in 2007, leading to a reported demand savings of 145 MW.

### Housing Initiatives for Low-Income Ontarians

In 2007, the OPA had underway three housing initiatives directed at low-income and assisted housing residents:

- Affordable Housing Energy Efficiency Program -- encourages the use of energy-efficient products in the construction of new housing built under the Canada-Ontario Affordable Housing Program
- Social Housing Program -- helps social housing providers take action to reduce energy use in their buildings

- Energy Efficiency Assistance for Houses Pilot -- provides energy audits and energy-efficiency retrofits for low-income homeowners and tenants in single-family dwellings

The housing initiatives were designed with two overriding objectives:

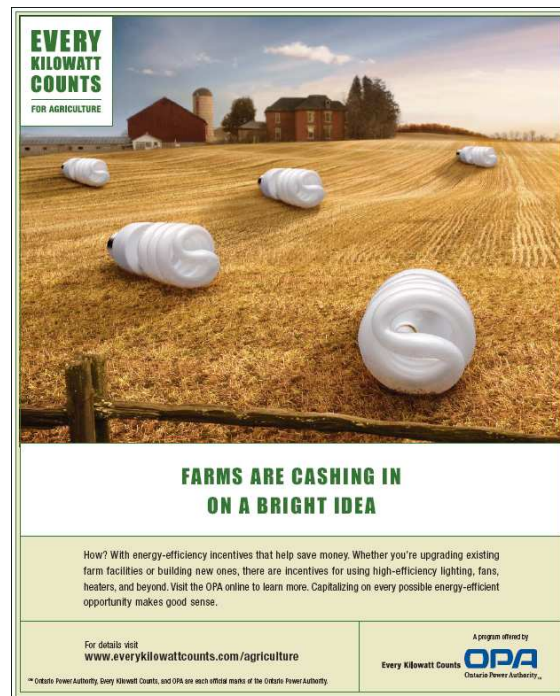
- to capture potential energy savings in Ontario's low-income housing through lighting and appliance upgrades, building improvements and consumer education
- to support program collaborators in the creating and delivering effective energy-management strategies to improve the quality and viability of housing in the low-income sector generally. This support is geared to capability building.

In 2008, the social housing and affordable housing program will be succeeded by a Multi-family Buildings Program geared to enhance the energy efficiency of buildings with six or more residential units. In addition, the Energy Efficiency Assistance for Houses Program will be rolled out province wide.

### Agricultural Marketing Initiative

In January 2007, the OPA started a marketing initiative to communicate energy-efficiency opportunities to the agricultural sector, specifically centered on increasing awareness and participation for a variety of energy conservation programs. Its main purpose is to engage farming communities on energy, since their members have traditionally been focused on managing their land.

An advertising campaign was developed that focused on benefits to farmers of the following programs: the Electricity Retrofit Incentive Program, the Renewable Energy Standard Offer Program, the High Performance New Construction Program (to be launched in 2008) and the Clean Energy Standard Offer Program. The ads appear regularly in agricultural periodicals. The campaign's messages and concepts focus on how electricity plays a key role in good land management, how the potential electricity savings are universally available across the sector and on the potential revenue opportunities.



In addition, the OPA published a monthly e-newsletter, which was met with an overwhelming response and increasing demand for information.

The marketing initiative is proving to be an extremely successful strategy for increasing Ontario farm participation in the OPA's conservation programs. In 2007, approximately 20 percent of participants in the Electricity Retrofit Incentive Program delivered by Hydro One Networks were agricultural customers, and four farms have also applied to the OPA's Renewable Energy Standard Offer Program.

## Industrial Highlights

In 2007, the OPA had two demand response programs in market. The results for these programs are summarized below.

**Table 4 -- Industrial Programs 2007 verified results**

|                                                            | <b>DR1</b> |
|------------------------------------------------------------|------------|
| Total contracted capacity at end of 2007 (MW)              | 317.4      |
| Curtailment at 1-hour system peak <sup>4</sup> (MW)        | 141.9      |
| Maximum aggregated curtailment (MW)                        | 225.9      |
| Peak Reliability (max. curtailment as % of capacity)       | 81 %       |
| Average curtailment over all actual curtailment hours (MW) | 113        |
| Average reliability (average curtailment as % of capacity) | 41 %       |

Key milestones and highlights of the industrial programs in market in 2007 are detailed below. Complete descriptions of both demand response programs are provided in the appendix.

### Demand Response 1

The Demand Response 1 (DR1) program was initially launched in 2006 as a demonstration project to better understand customer interest in participating in demand response. The program was designed to assist in reducing the system peak demand by leveraging the interest of large industrial customers to participate in demand response. Since the initial introduction of this program, both large and small customers, including aggregators, have come forward with an interest in participating in this initiative. The number of subscribers to the program has exceeded forecast, and the OPA had 317 MW of demand response capacity under contract from participant projects at the end of 2007. Approximately 45 percent of the projects under contract at the time responded with load curtailments during the one-hour system peak in June 2007. The experiences, capability building and successes of the DR1 program have been instrumental in the design and launch of the Demand Response (DR3) program.

### Demand Response 3

On November 9, 2007, the OPA launched the second program in its suite of demand response initiatives. Unlike the voluntary load curtailments in the DR1 program, the DR3 Program comes with specific contractual obligations to reduce the amount of power being used during certain periods of the year. Participants must be available for approximately 1,600 hours per calendar year for possible dispatch and can select load reductions of up to 100 or 200 hours per year. This guaranteed demand reduction allows power planners to reduce the total system demand for electricity and, therefore, all ratepayers' electricity costs over the long term. Both direct participants and aggregators can participate subject to contracting for minimum business levels of five MW and 25 MW respectively. The application process began with the launch of the program. Contracting will occur through early 2008, with first contracted load reductions expected in June 2008.

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<sup>4</sup> The one-hour system peak in 2007 occurred at the 16<sup>th</sup> hour of June 26.

## Conservation Awareness

In 2007, the OPA undertook a broad range of conservation awareness initiatives. These projects help to raise Ontarians' understanding of the need and ways to conserve energy and help the OPA in optimally targeting, delivering and tracking its conservation programs.

### Usage and Attitudes study

In 2007, the OPA conducted market research to analyze existing consumer attitudes, behaviours and barriers to energy conservation. The research established baseline data that will be used in subsequent years to track changes in consumer attitudes and behaviours.

### Summer Conservation Programs Launch

On April 18, 2007, the OPA hosted a media event at the National Home Show to unveil Ontario's 2007 summer conservation programs. To encourage Ontarians to think about electricity generation and conservation, the OPA designed a "pedal power" display using bike generators to show how much easier it is to conserve energy than it is to generate it. Students from Kipling Collegiate Institute, a Gold Eco-School Award winner, rode the bicycles during the demonstration.



### Electricity Conservation Awareness Day at Rogers Centre

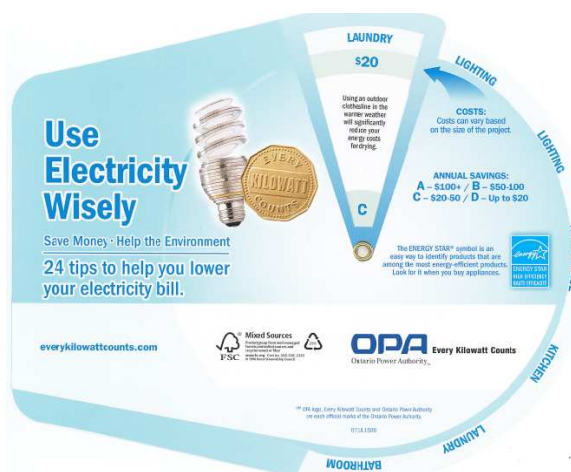


The OPA hosted Conservation Awareness Day at the Blue Jays game on Sunday, July 22. The first 10,000 fans received an OPA-branded bobblehead of Blue Jay mascot Ace. CEO Jan Carr and Chief Energy Conservation Office Peter Love presented Paul Godfrey, President and CEO of the Toronto Blue Jays and Rogers Centre, with a Certificate of Recognition for leadership shown in implementing energy-efficient measures at Rogers Centre. Dominant advertising throughout the stadium promoted three summer

conservation programs. Fans also received a "Use Electricity Wisely" wheel with electricity savings tips as they left the game.

## Use Electricity Wisely Wheel

This interactive conservation information tool features 24 conservation actions for consumers to reduce electricity use while saving money. The wheel shows consumers how much it will cost for each action and how much they will save each year afterward. More than 70,000 wheels were distributed to Ontarians in 2007 through a wide range of events and partner organizations. The wheel was also modified into an online version.



## Habitat for Humanity



The OPA provided an \$80,000 grant towards the building of 10 ENERGY STAR qualified homes by Habitat for Humanity in Toronto. More than 1,000 volunteers helped build these energy-efficient homes, which will house 55 men, women and children. In addition to the OPA financial commitment, 10 OPA employees volunteered to take part in the Habitat build on August 14.

## Seasonal greeting card contest

The OPA ran a contest for Grade 4-8 students to design its 2007 seasonal greeting card, with a theme that depicted electricity generation, electricity conservation or power system planning. The pilot project was supported by Thunder Bay Hydro and a select number of schools in Ontario. One hundred drawings were submitted from five schools. The winning design was submitted by Ashley Andrea, age 10, from Thunder Bay.



## Conservation Fund

An important tool for incubating new ideas that could become tomorrow's electricity conservation programs is the OPA's Conservation Fund. Since 2005, the Fund's key objectives have been to both foster the market's capability to develop and deliver conservation services, and to test program approaches that the next generation of programs will require. The incubation function of the Fund helps to manage the risk inherent in developing new approaches or experimenting with new conservation service delivery channels.

The goals of the Conservation Fund are to:

- build marketplace capability for the design, delivery, marketing and uptake of conservation programs
- test new or unique conservation program elements
- use the results from pilot projects to help inform the development of future conservation programs.

### 2007 applications

The Conservation Fund's budget for 2007 was \$3 million, made available in three rounds of applications. In total, more than 30 applications to the fund were received in 2007, with funding provided to 15 projects.

|               | Number of projects | OPA contribution   | Total Project Costs |
|---------------|--------------------|--------------------|---------------------|
| Commercial    | 3                  | \$654,000          | \$1,351,100         |
| Residential   | 5                  | \$912,425          | \$1,994,194         |
| Institutional | 5                  | \$1,140,992        | \$3,930,847         |
| Industrial    | 2                  | \$439,270          | \$897,520           |
| <b>Total</b>  | <b>15</b>          | <b>\$3,146,687</b> | <b>\$8,173,661</b>  |

### Completed projects

In 2007, 15 projects were completed.

Among the most significant results:

- The ENERGY STAR for New Homes Program strengthened the business case for building energy-efficient new homes by delivering eight workshops for workers in the construction industry and nine workshops for home builders. In 2007, 5.6 percent of the 53, 449 new housing starts in Ontario were labelled ENERGY STAR qualified.
- The Demand Side Management Energy Program Learning Locations with AgEnergy Cooperative identified 54 opportunities for energy conservation and efficiency on Ontario farms.
- The Toronto Catholic District School Board's Energy Drill Schools Program achieved an average reduction in peak demand of 5.4 percent with a range of up to 30 percent reductions during Energy Drills.

### Building a community of practice

Building market capability was the purpose of the Conservation Fund's second annual "Building a Community of Practice" event, which was hosted at the OPA on November 21, 2007. More than 60 people attended, representing project participants and co-funders, with the opening address delivered by the OPA's Chair, Mr. John Beck. The purpose of the event was to discuss a range of electricity conservation program design and delivery lessons, challenges and best practices, as experienced by the project proponents that the Conservation Fund has supported to date. Presentations made by proponents and OPA staff are available on the Conservation Fund website.

## For more information

Independent evaluations of the Conservation Fund are available on the OPA website, along with comprehensive details on both current and completed pilot projects funded to date. Visit [www.powerauthority.on.ca/cfund](http://www.powerauthority.on.ca/cfund).

## Technology Development Fund

We are all becoming increasingly aware of the scarcity and rising cost of energy resources and the impact that energy production and consumption have on the environment. This makes it increasingly important that we focus on sustainability by emphasizing conservation and developing electricity resources with minimized environmental footprints, all within a framework of economic rationality.

The Technology Development Fund promotes the development and commercialization of technologies or applications that have potential to improve electricity supply, conservation or demand management. Technology development is an essential part of market transformation. The OPA collaborates with the Ontario Centres of Excellence Centre for Energy and the Centre for Energy Advancement through Technological Innovation, organizations with significant electricity sector and technology expertise which help to share the risk inherent in the development of emerging technologies. Largely owing to our relationships with these organizations, the fund has leveraged just over \$11 million in external contributions, a ratio of more than 10 to one.

The fund had a 2007 budget of \$1 million. Funding in 2007 has resulted in the selection of 10 projects to receive just over \$650,000.

Some of the projects approved for 2007 involve the following projects and innovations:

|              | <b>Number of projects</b> | <b>OPA \$ Funding</b> | <b>Total project cost</b> |
|--------------|---------------------------|-----------------------|---------------------------|
| Conservation | 6                         | \$291,789             | \$3,301,312               |
| Other        | 4                         | \$359,000             | \$2,164,350               |
| Total        | 10                        | \$650,789             | \$5,465,662               |

- nanowire-based solar cells to enhance the efficiency of plastic solar cells
- new technology to reduce electrical energy consumption in mechanical pulping by 20 percent
- variable-speed drive performance testing to establish the basis of a new standard for variable frequency drives to achieve market transformation
- pilot testing outdoor lighting applications utilizing LED technologies and intelligent control systems.

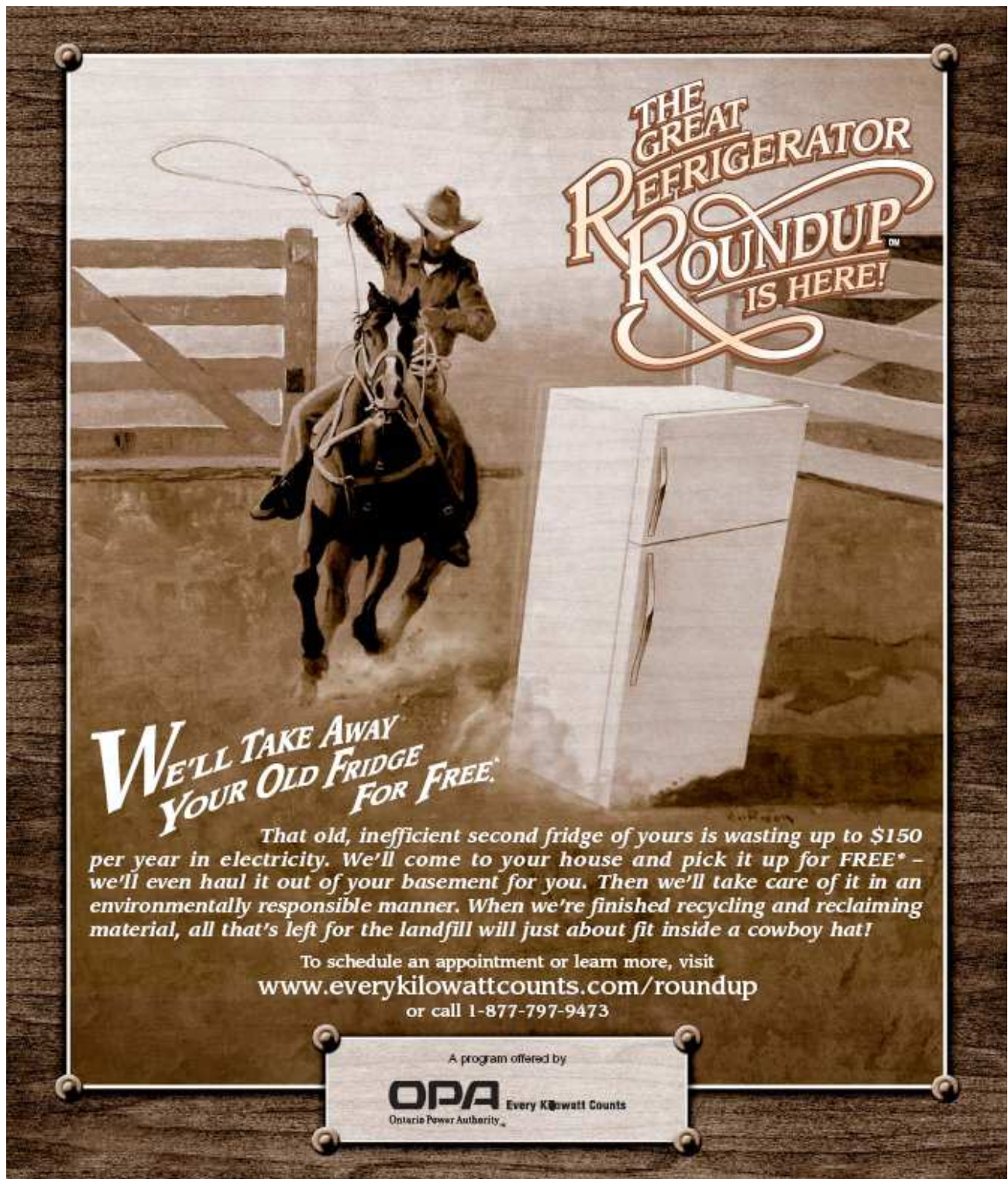
More information is available at the Technology Development Fund website, [www.powerauthority.on.ca/tdfund](http://www.powerauthority.on.ca/tdfund).

## Appendix -- Program summaries and materials

This appendix includes summary sheets for each conservation program in the OPA's 2007 portfolio of programs. Copies of select marketing materials are also provided where available.

**Note:** The descriptions provided are for 2007 only. Many programs will continue into 2008; however, there may be modifications to program elements from year to year.

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program name:                            | <b>Great Refrigerator Roundup<br/>(LDC Appliance Retirement Program)</b>                                                                                                                                                                                                                                                                                                                                                                                  |
| 2007 In-market dates:                    | June 25 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Objectives:                              | <ul style="list-style-type: none"> <li>• Achieve energy and demand savings through the removal and decommissioning of older working inefficient secondary and primary refrigerators, freezers and air conditioners</li> <li>• Improve conservation awareness in the market through information materials provided to program participants.</li> </ul>                                                                                                     |
| Target market:                           | <ul style="list-style-type: none"> <li>• Ontario households with full-size, working fridges or freezers over 10 years old.</li> </ul>                                                                                                                                                                                                                                                                                                                     |
| Program description:                     | <ul style="list-style-type: none"> <li>• Free pick-up and removal of older, working, inefficient full-size fridges and freezers</li> <li>• The program also picks up old air-conditioners, mini-fridges and mini-freezers if a full-sized fridge or freezer has already been scheduled for pick-up.</li> <li>• Appliances are decommissioned in an environmentally responsible manner, with only a small amount of material going to landfill.</li> </ul> |
| Program partners/<br>delivery structure: | <ul style="list-style-type: none"> <li>• ARCA Canada Inc. and Appliance Recycling Centers of America Inc. (online appointment booking, pick-up and decommissioning services)</li> <li>• Green Group (external program manager)</li> <li>• 75 LDCs (local promotion to their customer base)</li> </ul>                                                                                                                                                     |
| Marketing elements:                      | <ul style="list-style-type: none"> <li>• Local promotion by participating LDCs through bill inserts, bill messages, customer newsletters</li> <li>• Community and ethnic newspaper advertising</li> <li>• Province-wide print and radio advertising</li> <li>• Program website (information and appointment booking)</li> <li>• Toll-free number (appointment booking)</li> </ul>                                                                         |

An advertisement for the 'The Great Refrigerator Roundup' program. The background is a sepia-toned illustration of a cowboy on a horse, swinging a lasso towards a large, white, upright refrigerator standing in a corral. The cowboy is wearing a hat and boots. The refrigerator is a standard two-door model. The entire scene is framed by a dark, textured border that looks like wood or stone.

**THE GREAT REFRIGERATOR ROUNDUP™ IS HERE!**

**WE'LL TAKE AWAY YOUR OLD FRIDGE FOR FREE.\***

*That old, inefficient second fridge of yours is wasting up to \$150 per year in electricity. We'll come to your house and pick it up for FREE\* – we'll even haul it out of your basement for you. Then we'll take care of it in an environmentally responsible manner. When we're finished recycling and reclaiming material, all that's left for the landfill will just about fit inside a cowboy hat!*

To schedule an appointment or learn more, visit  
[www.everykilowattcounts.com/roundup](http://www.everykilowattcounts.com/roundup)  
or call 1-877-797-9473

A program offered by  
**OPA** Every Kilowatt Counts  
Ontario Power Authority

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program name:                        | <b><i>peaksaver</i></b><br><b>(Residential and Small Commercial Demand Response)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2007 In-market dates:                | June 2007-December 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Objectives:                          | <ul style="list-style-type: none"> <li>• Development of voluntary demand response capacity in the residential and small commercial sector</li> <li>• Educate consumers about the electricity system and the benefits of peak demand reduction including enhancing system reliability, reducing system costs and benefits to the environment.</li> </ul>                                                                                                                                                                                                                      |
| Target market:                       | Residential and small commercial (<50 kW demand) customers that have central air conditioning and are located in service territories of summer-peaking LDCs.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Program description:                 | <ul style="list-style-type: none"> <li>• LDCs install load control devices on the central air conditioners (and electric water heater where applicable) of eligible customers who volunteer to participate in the program.</li> <li>• During high electricity demand periods, the devices are remotely activated to reduce air conditioner/water heater operation for short periods, leading to an overall reduction in demand.</li> <li>• The load control device is installed at no cost and the participant receives a \$25 financial incentive for enrolling.</li> </ul> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>• 52 participating, summer-peaking, LDCs -- responsible for local marketing, participant enrolments, fulfillment of financial incentives, reporting, customer care and device maintenance.</li> <li>• The OPA is contracting separately for dispatch administration and aggregation operation to manage and report on the device activations.</li> </ul>                                                                                                                                                                              |
| Marketing elements:                  | <ul style="list-style-type: none"> <li>• Radio advertising</li> <li>• Program website</li> <li>• Local marketing and events by LDCs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                               |



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Ontario Power Authority

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In cooperation with

Insert LDC logo and associated marks\*  
(an asterisk must appear after each mark)

\*The LDC logo and associated marks are the property of the LDC and are used under license. The LDC logo and associated marks are not to be used in any other manner without the express written consent of the LDC.

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program name:                        | <b>Summer Savings Challenge</b>                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2007 In-market dates:                | July 1 - August 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Objectives:                          | <ul style="list-style-type: none"> <li>• Reduce electricity consumption by 10 percent in participating households during the season with highest energy demand</li> <li>• Support Ontario's culture of conservation by increasing customers' awareness of the relationship between conservation activities and reduced energy bills.</li> </ul>                                                                                          |
| Target market:                       | <ul style="list-style-type: none"> <li>• All residential class, single-family household customers who are individually metered, within a participating LDC</li> </ul>                                                                                                                                                                                                                                                                    |
| Program description:                 | <ul style="list-style-type: none"> <li>• Customers receive a 10 percent bill credit for reducing their electricity consumption during the program period by 10 percent or more compared to their consumption in the same period in the previous year.</li> <li>• All residential class, single-family household customers who are individually metered within a participating LDC were automatically eligible to participate.</li> </ul> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>• Delivered through 70 participating local distribution companies</li> </ul>                                                                                                                                                                                                                                                                                                                      |
| Marketing elements:                  | <ul style="list-style-type: none"> <li>• Province-wide advertising: newspaper, radio and outdoor ads</li> <li>• Promoted program in the Every Kilowatt Counts direct mail brochure</li> <li>• Program website</li> <li>• LDC bill inserts</li> </ul>                                                                                                                                                                                     |



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| Program name:                        | <b>Energy Efficiency and Conservation Measures for Aboriginal Communities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2007 In-market dates:                | May 8 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Objectives:                          | <ul style="list-style-type: none"> <li>Identify opportunities for electricity conservation and effective channels for delivery of conservation in Ontario's Aboriginal communities</li> <li>Increase capability building and conservation awareness among a key segment of the Ontario population</li> <li>Develop a program with input from various stakeholders, along with guidance from a Council of Elders and Community Champions.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Target market:                       | <ul style="list-style-type: none"> <li>On-reserve First Nation households (kits &amp; retrofit pilot)</li> <li>All Aboriginal communities and individuals (conference).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Program description:                 | <p>Initiated in 2007 and to continue in 2008, the program includes several components:</p> <p><b>Conserve the Light Gathering</b></p> <ul style="list-style-type: none"> <li>May 8-9, 2007, in Thunder Bay, served as program launch and general input session</li> </ul> <p><b>Energy conservation kits/education &amp; awareness</b></p> <ul style="list-style-type: none"> <li>Delivery of 23,000 electricity conservation kits and community coordinated distribution and installation. Kits provided free of charge and include four-language product guide</li> </ul> <p><b>Energy retrofit pilot</b></p> <ul style="list-style-type: none"> <li>250 comprehensive energy audits and retrofit measures, in five communities in three regions (central, near north &amp; far north)</li> <li>Builds upon Georgina Island Pilot Project (OPA Conservation Fund project in 2006)</li> </ul> <p><b>Awareness</b></p> <ul style="list-style-type: none"> <li>Website</li> <li>Pilot education program for Aboriginal schools</li> </ul> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>Charles Fox Consulting (external program manager)</li> <li>Development of program components by Council of Elders and Community of Champions</li> <li>Hydro One (distribution of in-home energy monitors to five retrofit pilot communities)</li> <li>Hydro One Remotes (delivery of energy kits to hard-to-reach First Nations communities)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Marketing elements:                  | The conference hosted last spring launched the brand of "Conserve the Light," which dovetails traditional Aboriginal imagery with energy symbols. These illustrations have been used on all the program material and on the program's website.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |



|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Program name:                        | <b>Hot Cool Savings<br/>(Home Heating and Cooling Efficiency Program)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2007 In-market dates:                | January 1 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Objectives:                          | <ul style="list-style-type: none"> <li>• Increase the number of purchases of high-efficiency heating equipment that have an energy-efficient motor</li> <li>• Increase the number of programmable thermostats installed on heating/cooling systems</li> <li>• Encourage homeowners to purchase ENERGY STAR qualified cooling system when the existing unit requires replacement</li> <li>• Encourage homeowners to have their cooling system maintained on a regular basis prior to the start of the cooling season.</li> </ul>                |
| Target market:                       | Residential customers with inefficient central cooling/heating systems                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Program description:                 | <p>The program provides incentives to homeowners to:</p> <ul style="list-style-type: none"> <li>• replace existing central cooling systems with an ENERGY STAR qualified air conditioning system</li> <li>• install a programmable thermostat through a contractor</li> <li>• install ENERGY STAR qualified heating systems, specifically with an energy-efficient furnace motor.</li> </ul> <p>The program also encourages homeowners to have their central air conditioner tuned-up prior to the main cooling months of July and August.</p> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>• Delivered through registered heating, ventilation and air conditioning contractors across the province</li> <li>• Managed by Heating, Refrigeration and Air Conditioning Institute of Canada.</li> </ul>                                                                                                                                                                                                                                                                                              |
| Marketing elements:                  | <ul style="list-style-type: none"> <li>• Program website with participating contractor look-up tool</li> <li>• Brochures.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                           |



MAKE THE  
**BIG**  
**Saves**  
**THIS WINTER**  
IN OUR HOT SAVINGS  
REBATE PROGRAM

Hot Savings  
Rebate

HRAI

**SAVE MONEY AND ENERGY** by taking  
advantage of 3 hot deals from **YOUR NAME HERE**

**SAVE up to**  
**\$675.00**

**when undertaking the following work:**

- installing an ECM equipped furnace
- installing a new programmable thermostat
- replacing an existing central air conditioner with an ENERGY STAR® qualified system.

By participating in the Conservation Bureau's Hot Savings Rebate Program, you are not only saving yourself money, you are helping to develop a culture of conservation in Ontario.  
Program ends March 31st, 2007.

**For more information visit [www.conservationbureau.on.ca](http://www.conservationbureau.on.ca)  
or call 1.866.859.9898, or contact:**

**BOTH OF THESE CENTRAL AIR CONDITIONERS  
PALE IN COMPARISON  
TO YOUR AWARD-WINNING  
ROSE GARDEN.**



**BUT ONE IS ENERGY STAR®-QUALIFIED.  
SO IT'S BETTER.**

UP TO \$600 IN REBATE AVAILABLE.  
NOW THAT'S COOL SAVINGS.



Ontario Power Authority

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|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program name:                            | <b>Every Kilowatt Counts<br/>(Residential Education and Incentive Program)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2007 In-market dates:                    | Spring campaign: April 16 - June 17, 2007<br>Fall campaign: September 16 - November 30, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Objectives:                              | <ul style="list-style-type: none"> <li>• Provide homeowners with information on easy-to-do conservation activities within their home or apartment</li> <li>• Provide worthwhile incentives to homeowners and tenants to take action on one or more of the easy-to-do actions identified in the education and coupon program</li> <li>• Achieve two MW summer peak demand reduction and 1,400 GWh lifetime energy savings</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Target market:                           | All Ontario households                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Program description:                     | <p>A retailer-based program that encourages consumers to purchase and install featured energy-saving products by providing them with information and instant discount rebates. Products featured in 2007 were ENERGY STAR® CFLs, outdoor solar lights, dimmers, motion sensors, timers, furnace filters, ENERGY STAR ceiling fans, seasonal LEDs, ENERGY STAR residential light fixtures, baseboard programmable thermostats and power bars with timer.</p> <p>The fall campaign included a community-based social marketing initiative run by the non-profit organization Project Porchlight. The campaign mobilized volunteers to deliver 500,000 ENERGY STAR qualified CFL bulbs door to door across 89 Ontario communities. Along with each bulb, an information piece with three coupons was provided. The group also ran seasonal light-exchange events in 26 communities, in which customers who turned in one or more strings of old incandescent lights were given a special 2-for-1 voucher on the purchase of new LED seasonal light strings.</p> |
| Program partners/<br>delivery structure: | <ul style="list-style-type: none"> <li>• Energyshop.com (external program manager)</li> <li>• 81 LDCs (co-branding and mailing list for spring campaign brochure)</li> <li>• Over 46 participating retailers (accept and remit coupons)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Marketing elements:                      | <ul style="list-style-type: none"> <li>• Direct mail brochure to all Ontario households</li> <li>• Province-wide radio and print advertising</li> <li>• Program website</li> <li>• Co-op promotions with LDCs</li> <li>• In-store merchandising and staff training</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Energy-efficient products.**



**The savings really add up.**

**INSTANT REBATES**  
on energy-efficient products available here.



**OPA**  
Ontario Power Authority

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|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program name:                        | <b>Energy Efficiency Assistance for Houses -- Pilot Program (Low Income Single Family Program)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2007 In-market dates:                | November 9, 2006 - December 31, 2007.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Objectives:                          | <ul style="list-style-type: none"> <li>• Achieve energy and demand savings in low-income single-family homes to support the 100 MW low-income and social housing directive</li> <li>• Create awareness among low-income households and their support networks about the benefits of energy conservation</li> <li>• Establish effective channels for the delivery and implementation of conservation programs sensitive to the needs of the low-income community.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                            |
| Target market:                       | <ul style="list-style-type: none"> <li>• Up to 2,500 homeowners and tenants: low-income families, fixed-income seniors, sole-support parents, and disabled and working poor residents in single, semis and row-type housing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Program description:                 | <p>The pilot program includes program eligibility screening, an energy audit, free installation of energy-efficient measures, education and outreach, and measurement and verification.</p> <p>Participants may receive the installation of these basic energy-efficient measures: CFLs, lighting fixtures, low-flow showerheads, indoor clotheslines, water heater blankets and hot water pipe insulation, and programmable thermostats.</p> <p>In old, drafty and less energy-efficient houses, program participants may be eligible to receive these extended energy-efficient measures: lighting controls; occupancy sensors; ceiling fans; refrigerators; furnace filter cleaning or replacement; water heater repair or replacement; caulking, draft-proofing and insulation; repair of broken windows or exterior doors; air conditioning tune-ups or fans.</p> |
| Program partners/delivery structure: | Enviro Centre (EC) and Green Communities Canada (GCC), two community based not-for-profit organizations, were selected through a competitive process to design and delivery the pilot program. EnviroCentre delivered mainly in Eastern Ontario, and GCC delivered in various pilot communities across the province.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Marketing elements:                  | <p>GCC and EC coordinated implementation of the program including marketing and coordination with:</p> <ul style="list-style-type: none"> <li>• community-based agencies, e.g., churches, food banks</li> <li>• social services organizations</li> <li>• charitable organizations working directly with vulnerable households and people on the verge of homelessness</li> <li>• local distribution companies and utilities</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                 |

# Save Money on your electricity bills!



**Energy Efficiency Assistance Program for Houses**  
A **FREE** service to help income eligible  
households save **energy & money!**



For information contact REEP at:  
**519-744-9799**

Applications can be downloaded at:  
**[www.reepwaterlooregion.ca](http://www.reepwaterlooregion.ca)**

## Are you eligible for FREE home upgrades?

- ☑ Your home is electrically heated.
  - ☑ You pay your own electricity bill.
  - ☑ You live in a house (rented or owned).
  - ☑ Your household benefits from a qualifying social program.
- OR**
- ☑ Your total adult household income does not exceed set limits.
- Call or see website to see if you qualify.



The Energy Efficiency Assistance Program for Houses is a pilot program of the Ontario Power Authority and participating local utilities available in selected communities in Ontario in 2007.



REEP is a project of Waterloo Region Green Solutions, a member of Green Communities Canada and is the local delivery agent of this program. Green Communities Canada is a national association of local non-profit organizations that deliver environmental programs and services.

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Program name:                        | <b>Affordable Housing Energy Efficiency Program</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2007 In-market dates:                | February 8, 2007 to February 28, 2008.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Objectives:                          | <ul style="list-style-type: none"> <li>• To contribute to achieving energy and demand savings as contemplated by the 100 MW social housing and low-income directive</li> <li>• Establish the linkage and demonstrate the impact that energy efficiency has on reducing operational costs in affordable housing</li> <li>• Create awareness amongst Affordable Housing Program (AHP) service managers, housing providers, developers, architects, building operators and managers, and residents about the benefits of energy conservation.</li> </ul>                                                                                                                                                                                                                                                                                                            |
| Target market:                       | <ul style="list-style-type: none"> <li>• Approximately 5,000 housing units within AHP. These include a combination of home-owners and tenants such as low-income families, fixed-income seniors, sole-support parents, and disabled and working poor residents.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Program description:                 | <ul style="list-style-type: none"> <li>• <b>Financial Incentives</b> (up to \$850/unit) -- to help offset the incremental cost of ENERGY STAR® products with standard products</li> <li>• <b>Training and education</b> -- to instill energy-efficient practices and encourage energy-efficient behaviours to the AHP stakeholders, residents, building operators, municipal service managers and housing providers</li> <li>• <b>Marketing and communications</b> – to ensure AHP municipal service managers, AHP developers and buildings and housing providers are aware of and participate in the program</li> <li>• <b>Access to technical resources</b> – to provide energy-efficiency information and technical assistance to service managers, housing providers, AHP developers and builders</li> <li>• <b>Measurement and verification.</b></li> </ul> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>• Natural Resources Canada (co-funder until March 31, 2007)</li> <li>• Ministry of Municipal Affairs and Housing (MMAH) (program implementer)</li> <li>• Other key stakeholders: Canadian Mortgage Housing Corporation; municipal service managers; housing providers; housing developers, builders, and operators; not-for-profit organizations; housing co-ops; LDCs and gas utilities</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Marketing elements:                  | <ul style="list-style-type: none"> <li>• MMAH marketed the program with municipal service managers, housing providers, developers and operators via <ul style="list-style-type: none"> <li>□ six regional outreach workshops</li> <li>□ direct mail</li> <li>□ telephone calling</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



**AFFORDABLE HOUSING PROGRAM –**

**ENERGY EFFICIENCY PROGRAM**

Are you a housing proponent under the Affordable Housing Program?

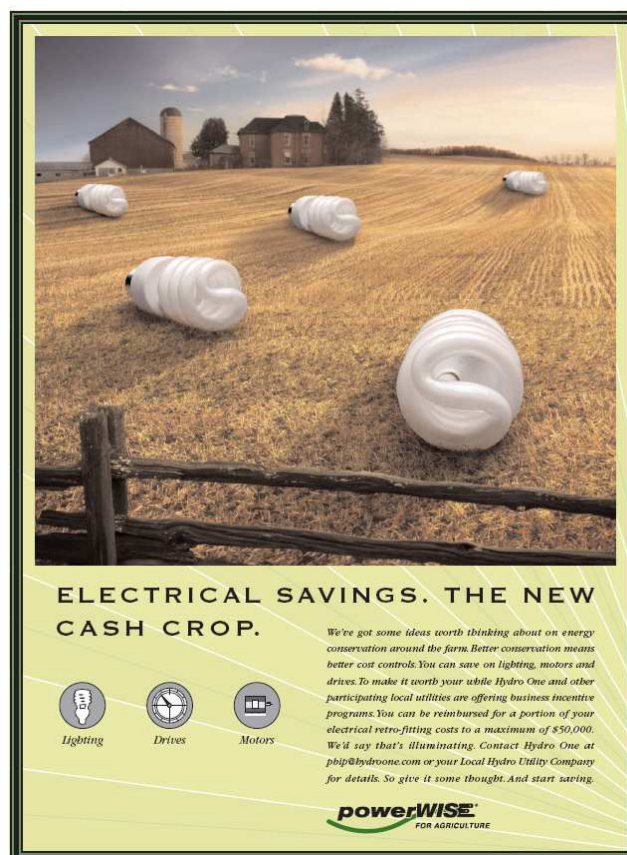
Did you purchase energy efficiency items in between September 15, 2006 and September 30, 2007?

If so, you may qualify for a financial incentive!

Application Forms can be found on the Ministry of Municipal Affairs and Housing's website at <http://www.mah.gov.on.ca/Page134.aspx>

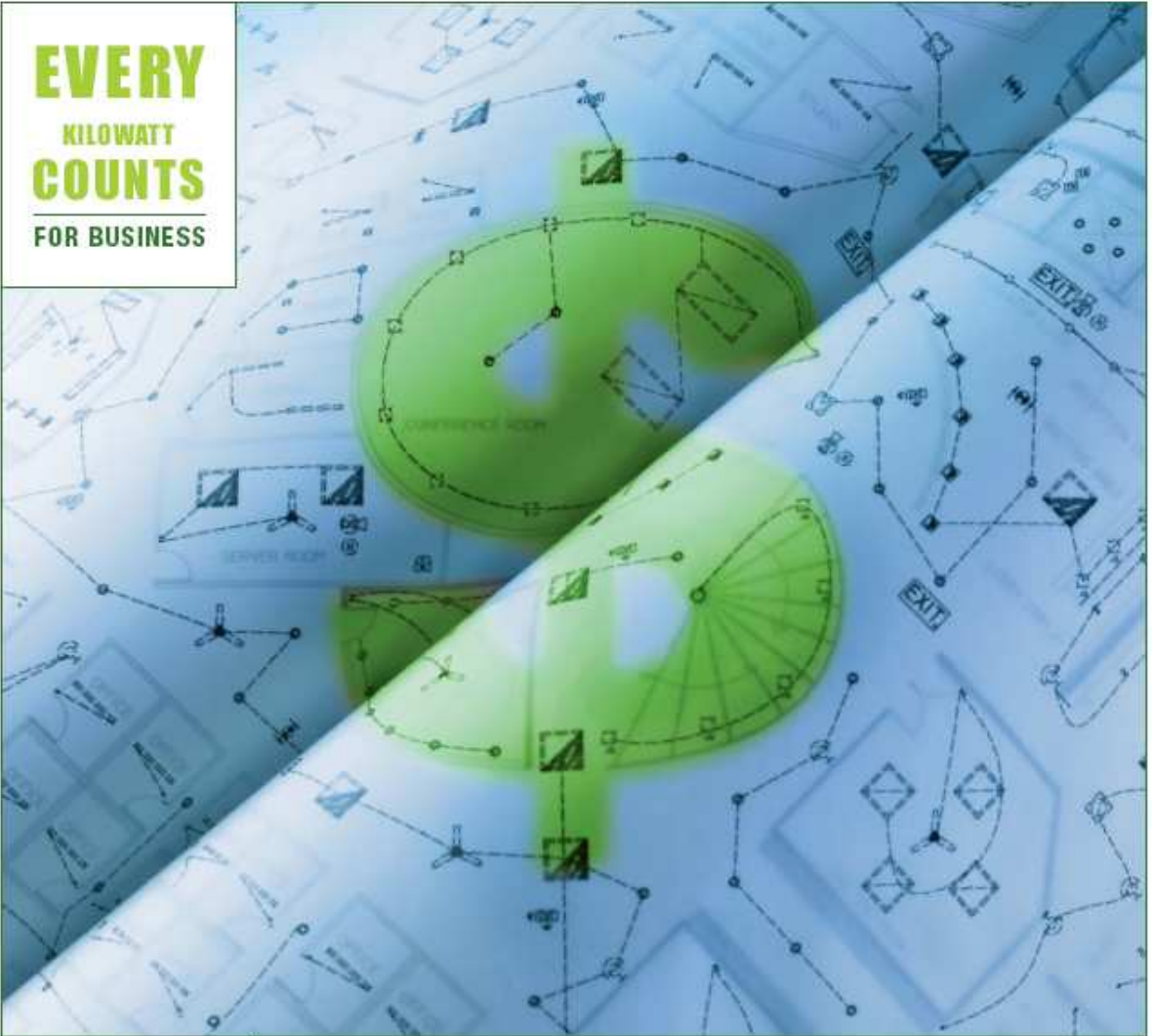
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| Program name:                        | <b>Social Housing Program</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2007 In-market dates:                | January 1 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Objectives:                          | <ul style="list-style-type: none"> <li>• Encourage the purchase and installation of energy-efficient products by social housing providers</li> <li>• Encourage the improvement of building envelopes by social housing providers.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Target market:                       | Social housing providers in Ontario                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Program description:                 | <p>Financial incentives and education for the purchase and installation of energy-efficient products:</p> <ul style="list-style-type: none"> <li>• <i>Interest buy down (up to seven percent or four years) or grant</i> – enables housing providers to borrow money for energy-efficiency improvements without being required to put their registration on their title.</li> <li>• <i>Back-stopping financing through loan guarantee</i> – enables housing providers to borrow money for energy-efficiency improvements, with the OPA assuming a contingent liability of up to \$6.7 million.</li> </ul> <p>Program eligible -- energy-efficient product list:</p> <ul style="list-style-type: none"> <li>• lighting lamps and fixtures (interior and exterior areas, in-suite and common areas, indoor and outdoor)</li> <li>• ENERGY STAR common-area clothes washers</li> <li>• ENERGY STAR refrigerators and dishwashers</li> <li>• low-flow showerheads</li> <li>• windows</li> <li>• kitchen and bathroom aerators</li> <li>• HVAC automated control systems, heating system improvements</li> <li>• motors for central pumps and fans</li> <li>• heat reflector panels</li> <li>• building envelope improvements (e.g., air sealing, insulation upgrades).</li> </ul> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>• Social Houses Services Corporation (SHSC) (program manager)</li> <li>• Other key stakeholders: <ul style="list-style-type: none"> <li><input type="checkbox"/> municipal service managers</li> <li><input type="checkbox"/> developers and builders</li> <li><input type="checkbox"/> non-profit housing providers</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Marketing elements:                  | <ul style="list-style-type: none"> <li>• SHSC promoted the program at service manager network forums and events held by the Ontario Non Profit Housing Association and various providers' meetings.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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| Program name:                        | <b>Agricultural Energy Efficiency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2007 In-market dates:                | January 1 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Objectives:                          | Increasing the agricultural sector's awareness of and participation in the OPA's energy-efficiency programs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Target market:                       | Agricultural sector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Program description:                 | <p>An advertising campaign focused on the benefits of the following OPA programs for the agricultural sector:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Electricity Retrofit Incentive Program</li> <li><input type="checkbox"/> Renewable Energy Standard Offer Program</li> <li><input type="checkbox"/> High Performance New Construction Program</li> <li><input type="checkbox"/> Clean Energy Standard Offer Program</li> </ul> <p>The ads appear regularly in agricultural periodicals. The messages and concepts focus on how electricity plays a key role in good land management, how the potential electricity savings are universally available across the sector and on the potential revenue opportunities.</p> <p>In addition, the OPA started publishing a monthly e-newsletter.</p> |
| Program partners/delivery structure: | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Marketing elements:                  | See program description.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |



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| Program name:                        | <b>Electricity Retrofit Incentive Program (ERIP)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2007 In-market dates:                | August 1, 2007 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Objectives:                          | <ul style="list-style-type: none"> <li>• To encourage energy conservation awareness and build conservation capability across the business sector</li> <li>• To offer financial incentives for energy retrofits that result in peak demand savings and annual energy savings that are sustainable, measurable and verifiable to small, medium and large consumers.</li> </ul>                                                                                                                                                                                                                                                                                                                                                           |
| Target market:                       | Electricity customers in the commercial, institutional, industrial and agricultural sectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Program description:                 | <p>The program focuses on lighting; motors; heating, ventilation and air conditioning; and overall electricity systems.</p> <p>The program offers two tracks for retrofit incentives:</p> <ul style="list-style-type: none"> <li>• <u>Prescriptive</u> -- predefined technologies, with associated predefined energy savings, and predefined financial incentives</li> <li>• <u>Custom</u> -- allows owners to use other, more specific solutions to their electricity-efficiency retrofitting. Custom projects are evaluated on the power and energy performance improvement of the specific technology, equipment and systems installed. Reimbursements are based on the specific level of energy-efficiency improvement.</li> </ul> |
| Program partners/delivery structure: | <ul style="list-style-type: none"> <li>• Delivered through 66 participating local distribution companies (LDCs)</li> <li>• Consumers interested in participating send their applications directly to their local LDC for review and approval.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Marketing elements:                  | <ul style="list-style-type: none"> <li>• Primarily marketed through the LDCs using joint advertising and a central brand approved by the OPA</li> <li>• Program website.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**EVERY  
KILOWATT  
COUNTS  
FOR BUSINESS**



**PLAN ON  
ERIP**

**ELECTRICITY RETROFIT INCENTIVE PROGRAM**

**ARE YOU MAKING CHANGES** to the lighting, HVAC system, motors and over-all electrical system of your commercial or industrial building? To save you money on electricity costs and help out the environment, plan on the **ELECTRICITY RETROFIT INCENTIVE PROGRAM**. It's a program that provides incentives for changes that save on electricity.

**THE BOTTOM LINE IS ELECTRICAL EFFICIENCY GOES STRAIGHT TO YOUR BOTTOM LINE.**

|                                                                                                                                                                 |                                                                                                             |                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| A program offered by<br><br>Every Kilowatt Counts<br>Ontario Power Authority | For details visit<br><a href="http://www.everykilowattcounts.com/ERIP">www.everykilowattcounts.com/ERIP</a> | In cooperation with<br>[Insert LDC logo and associated marks*<br>(an asterisk must appear after each mark)] |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|

\* OPA, Ontario Power Authority, and Every Kilowatt Counts are each official marks of the Ontario Power Authority.

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| Program name:                        | <b>Toronto Comprehensive</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2007 In-market dates:                | March 2007 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Objectives:                          | 300 MW of demand reduction in the City of Toronto by 2010 (ministerial directive)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Target market:                       | New construction and existing buildings in the City of Toronto                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Program description:                 | <p>The program includes custom energy-efficiency (retrofit and new construction) projects for all sectors delivered in Toronto by Building Owners and Managers Association (BOMA) of Greater Toronto, City of Toronto and Toronto Hydro.</p> <p><b>BOMA component</b><br/>Incentives for retrofits that provide sustainable electrical demand and energy reductions in existing commercial buildings larger than 25,000 square feet</p> <p><b>City of Toronto (Energy Efficiency Office) component</b></p> <ul style="list-style-type: none"> <li>• Better Buildings Program -- for retrofits to existing MUSH* sector and multi-family buildings.</li> <li>• Better Buildings Program (New Construction) -- for energy-efficiency upgrades to all non-residential new construction buildings.</li> </ul> <p><b>Toronto Hydro component</b><br/>A portfolio of projects targeted at existing commercial buildings smaller than 25,000 square feet and industrial properties</p> <p>*Municipalities, university, schools and hospitals</p> |
| Program partners/delivery structure: | <p>Program is delivered through three program managers:</p> <ul style="list-style-type: none"> <li>• Building Owners and Managers Association (BOMA)</li> <li>• The City of Toronto Energy Efficiency Office</li> <li>• Toronto Hydro</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Marketing elements:                  | <p>Each program manager is responsible for its own marketing and publicity. Typical outreach and development activities include:</p> <ul style="list-style-type: none"> <li>• websites</li> <li>• earned media</li> <li>• industry events</li> <li>• program brochures</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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| <b>Program name:</b>                        | <b>Demand Response 1 (DR1)<br/>(Voluntary Economic Demand Response)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>2007 In-market dates:</b>                | January 1 - December 31, 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Objectives:</b>                          | <ul style="list-style-type: none"> <li>• Encourage load shifting from peak period to off-peak period, permitting the reduction of system on-peak demand</li> <li>• Create short-term demand response capacity in response to the IESO three-hour ahead pre-dispatch price signal in the electricity market</li> <li>• Encourage demand response based upon high (hourly Ontario energy prices) market prices.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Target market:</b>                       | Any commercial or industrial facility with a minimum load of 500 kW. Both direct participants and aggregators can participate subject to contracting for this minimum level of business. The program is available to all regions of Ontario.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Program description:</b>                 | <ul style="list-style-type: none"> <li>• Program is “market based,” designed for consumers that can curtail load in response to economic signals, primarily using existing equipment and processes.</li> <li>• Participants receive compensation for curtailing the electricity demand of their project. Participants also receive compensation for an initial and independent assessment of the project potential and eligibility, and for monthly assessment and verifications of load reductions.</li> <li>• Projects can be based on load interruption, load shifting or behind-the-meter generation (excluding diesel, coal, bio-fuel, and bio-diesel).</li> <li>• No maximum on the number of hours of operation. Load curtailment is voluntary. Minimum of 0.5 MW load reduction, achievable for at least one hour in a relevant season. No financial penalties for under- or over-performance.</li> </ul> |
| <b>Program partners/delivery structure:</b> | <ul style="list-style-type: none"> <li>• Administered directly by the OPA</li> <li>• Participants offer their own “strike price” on a monthly basis, at which they are willing to curtail load. The participant’s strike price must be higher than the OPA’s minimum defined floor strike price for the month.</li> <li>• Project applications must include a measurement and verification (M&amp;V) plan, acceptable to the OPA. The M&amp;V plan and all curtailments must be verified by an M&amp;V consultant.</li> <li>• Participants receive monthly payments for curtailment.</li> </ul>                                                                                                                                                                                                                                                                                                                   |
| <b>Marketing elements:</b>                  | <ul style="list-style-type: none"> <li>• Promoted primarily through word of mouth, aggregators and some consultants</li> <li>• OPA website contains detailed information on the program and how to participate.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

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| Program name:                        | <b>Demand Response 3 (DR3)<br/>(Committed Resource Peak Shedding)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2007 In-market dates:                | Program launched November 9, 2007. Participant applications and contracting to occur through early 2008, with first contracted load reductions expected in June 2008.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Objectives:                          | To assist in reducing the system peak demand during predetermined scheduled periods noted for high demand, high prices and tight supply cushion by contracting the interest of a broad range of consumers to participate in managing the electricity needs of Ontario.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Target market:                       | <ul style="list-style-type: none"> <li>Any commercial or industrial facility with a minimum load of 50 kW.</li> <li>Available across Ontario except in the Bruce region, Southwestern Ontario and a portion of York Region.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Program description:                 | <p>The program provides incentives to major power users that contractually agree to reduce their power use by a pre-determined amount when called upon by the OPA.</p> <p>Participants make themselves available during scheduled hours for potential notices to reduce load. Participants can select to make themselves available to reduce load up to 100 hours or 200 hours per year. Contracts are available for one, three or five years.</p> <p>This guaranteed demand reduction allows power planners to reduce the total system demand for electricity and, therefore, all ratepayers' electricity costs over the long term.</p> <p>Both direct participants and aggregators can participate subject to contracting for minimum business levels of five MW and 25 MW respectively. Thus, given these restrictions, aggregators will be key to the success of this program, as they form the front line in securing participation by commercial and industrial properties.</p> |
| Program partners/delivery structure: | The program is delivered primarily through aggregators, and to a lesser extent, large industrial loads.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Marketing elements:                  | The program is promoted primarily through word of mouth, aggregators and some consultants, in addition to some targeted business marketing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |