

Builds Conservation Culture through Conservation & Demand


When it comes to electricity, it is far more cost effective for customers to conserve it than it is to generate new supply. And Hydro Ottawa is doing its part to build a conservation culture working in partnership with other distribution companies and its customers. "In 2005 Hydro Ottawa implemented 15 exciting Conservation and Demand Management (CDM) programs targeting all areas of our business, from our largest to our smallest customers," said Rosemarie Leclair, Acting President and CEO of Hydro Ottawa Limited. "Conservation has a positive impact on our local economy and it is something that each one of us needs to incorporate into our daily lives to make a real difference. We are playing an active role in the development of a lasting conservation culture in Ottawa."

Hydro Ottawa serves over 275,000 customers and is the second largest municipal electricity distributor in Ontario serving the City of Ottawa. Currently Hydro Ottawa has committed \$9.3 million for investment in first generation CDM programs. In an effort to create program efficiencies, Hydro Ottawa is working with five of the largest local distribution companies in the province including Enersource Hydro Mississauga, Horizon Utilities Corporation, PowerStream, Toronto Hydro Electric System and Veridian Connections - collectively referred to as the Coalition of Large Distributors (CLD). The CLD represents 1.7 million customers (40% of the province) and as a group are investing more than \$70 million in electricity conservation by September 30, 2007.

Hydro Ottawa already has in place many programs that are enabling residential, commercial, industrial, and institutional customers in Ottawa to benefit from a wide range of energy conservation measures.

Hydro Ottawa's powerWISE® *Business Incentive Program* provides financial incentives to qualifying business, industrial and institutional customers with an electricity demand of 50kW or more. These customers account for approximately 70% of all electricity consumption in Ottawa. The incentive level starts at \$150 per kW saved and allows Hydro Ottawa to provide up to \$50,000 in funding to offset the cost of energy efficiency projects. This program will positively impact the bottom line of all participants as well as help to reduce the peak demand on the overall electrical distribution system.

Another exciting and innovative project Hydro Ottawa is actively involved in is the powerWISE® Fridge Bounty Program. It has been one of the most successful Hydro Ottawa conservation programs to date. Although the initial plan was to reclaim 500 fridges over a sixteen-week period, Hydro Ottawa reached its target in the first six weeks. Customers have learned that most basement fridges, because they are usually older than 10 years, use about \$150 of electricity each year. Hydro Ottawa removed these fridges free of charge (an \$80 retail value), decommissioned the fridge in an environmentally sensitive way and left the customer with a powerWISE® Power Pack containing energy-efficient products

A photograph of Rosemarie Leclair, Acting President and CEO of Hydro Ottawa Limited. She is smiling and holding a compact fluorescent light bulb and a brochure titled "CHANGE".

Rosemarie Leclair,
Acting President and
CEO of Hydro Ottawa
Limited believes
that encouraging
customers to
conserve energy
and save money one
small step at a time
will add up to big
savings.

Photo courtesy of: Fred Cattrol

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and conservation information. The energy savings from this pilot program totaled 600,000 kWh per year, enough to power 67 homes, and saved customers more than \$50,000. Hydro Ottawa was so pleased with the results of this pilot project that it is re-launching the program in Ottawa and will be extending the program province-wide working in cooperation with the other local distribution companies. Hydro Ottawa's CDM plan also includes initiatives to improve the efficiency of the distribution system. *The Distribution Loss* program will improve the efficiency of the network and lead to significant financial savings. This program incorporates five different initiatives.

AdaptiVolt is a system that optimizes the voltage on our station distribution feeders within CSA regulations and without any adverse effects. Three Hydro Ottawa stations are being considered for conversion this year, saving enough electricity to power approximately 100 households per station.

Transformer Loss Reduction is a two-part initiative. This program includes exchanging older, inefficient distribution transformers with more efficient units. At the same time we will work with our manufacturer to build and supply more efficient transformers while ensuring that we are choosing the optimum transformer size necessary for the target load. The *Optimization of the distribution system configuration* is another initiative that will reduce line losses at many points along our distribution system.

Voltage conversion is a fourth initiative that

will increase electrical voltage in tandem with line loss reduction, while ensuring that we provide the same power output. A doubling of the voltage will reduce the losses by four times.

Lastly, *Power Factor Correction* will translate into improved efficiency in the delivery of power to several pockets of Hydro Ottawa's service territory, in the end benefiting the entire customer base.

Communicating the importance of energy conservation to the next generation of consumers is also a critical consideration in Hydro Ottawa's CDM plan. Hazard Hamlet is a bilingual program offered free of charge to all students in elementary schools within our service territory. Last year more than 3,500 students participated. While the main focus is electrical safety, a portion of the presentation is aimed at teaching children the importance of energy conservation. This year a second program is being developed for these students that will focus entirely on conservation. We hope to deliver the program to every elementary student in Ottawa over a 5-year period. WATT-meters will be loaned to many of the classes so that they can conduct their own home trials. These meters measure electricity consumption, giving students and their parents the opportunity of learning first hand how much electricity is consumed by each device or appliance in their home.

Hydro Ottawa's CDM initiatives are starting to pay noticeable dividends as we work with and leverage various partnerships and relationships. We are pleased with the extraordinary cooperation we've experienced working with our customers and local organizations. We have all benefited from shared learning and efficiencies and are confident in our ability to develop and sustain long-term conservation success in the Ottawa region.

Code Green

Code Green, an entertaining and informative six part television series that will be broadcast nationwide by CBC TV in the spring of 2006. This 'reality TV' energy conservation game show pits twelve Canadian homeowners against one another. Given the same budget, their challenge is to retrofit their homes in an effort to reduce their electrical and water consumption as well as their greenhouse gas emissions. At the end of the series, the successful homeowner will win a gas-electric hybrid car as a prize. This program will put a fun spin on the important topic of energy conservation. It will also provide homeowners across Canada with valuable information on how to reduce energy consumption and save money in their own homes.

How Many Canadians does it take to change a light bulb?

Hydro Ottawa is a founding sponsor of Project Porchlight, a local volunteer-based organization that has a goal of placing one compact fluorescent light (CFL) bulb in every home in Canada. CFL bulbs use about one quarter of the electricity of regular incandescent lights. Over 15,000 CFL bulbs have been delivered to homes in Ottawa South and plans are underway to roll this program out across the city. Visit www.onechange.org for more information.