



**Milton Hydro Distribution Inc.**

---

**Conservation and Demand Management  
Strategy 2011 - 2014**

**Filed: November 1, 2010**

Cameron McKenzie  
Director, Regulatory Affairs  
Milton Hydro Distribution Inc.  
8069 Lawson Road  
Milton, Ontario  
L9T 5C4  
Tel: (905)-876-4611 ext 246  
[cameronmckenzie@miltonhydro.com](mailto:cameronmckenzie@miltonhydro.com)

# TABLE OF CONTENTS

<b>1.0 EXECUTIVE SUMMARY.....</b>	<b>2</b>
<b>2.0 CDM STRATEGY.....</b>	<b>2</b>
<b>3.0 OPA – CONTRACTED PROVINCE – WIDE PROGRAMS.....</b>	<b>4</b>
<b>3.1 CONSUMER PROGRAM.....</b>	<b>5</b>
<b>3.2 COMMERCIAL AND INSTITUTIONAL PROGRAMS.....</b>	<b>7</b>
<b>3.3 INDUSTRIAL PROGRAMS.....</b>	<b>9</b>
<b>4.0 PROGRAM MIX.....</b>	<b>11</b>
<b>5.0 CDM PROGRAMS CO-ORDINATION.....</b>	<b>13</b>

# 1 Executive Summary

## 1.1 Introduction

The Government of Ontario's policy on Green Energy incorporates Conservation and Demand Management ("CDM") as a key component of the strategy to reduce electricity demand and usage in Ontario. In response to this policy directive the Ontario Energy Board (the "OEB") has issued a Conservation and Demand Management ("CDM") Code. The CDM code is designed to ensure that distributors meet CDM targets in a cost effective and efficient manner to provide value to ratepayers. The achievement of the CDM targets is now a condition of a distributor's licence in the Province of Ontario.

This strategy document is hereby submitted by Milton Hydro Distribution Inc. (Milton Hydro) to the OEB based on requirements stated in the CDM Code (OEB File No. EB-2010-0215) and references the Electricity Conservation and Demand Management Targets (OEB File No. EB-2010-0216) for Electricity Distributors issued on June 22, 2010 by the OEB following the Directive issued by the Minister of Energy and Infrastructure on March 31, 2010.

Milton Hydro was allocated, by the OEB, a CDM target of 8 MW of peak demand savings and 34 GWh of energy savings to be achieved over a four year period beginning January 1, 2011.

Milton Hydro plans to meet the required CDM targets through the delivery of the Ontario Power Authority ("OPA")-Contracted Province-wide Programs for the four year period starting January 1, 2011. If required, Milton Hydro will perform a comprehensive evaluation of potential Tier 2 programs once the OPA programs are finalized and may pursue the implementation of Tier 2 and/or Tier 3 programs within its service territory. Milton Hydro is cognizant that coordination of effort and cost effectiveness is critical to the success of CDM delivery in the province and will work with other delivery agents including other local distribution companies, natural gas utilities, various levels of government and key channel partners as appropriate.

Milton Hydro is the local distribution company responsible for distributing electricity to more than 28,890 residential and business customers within the Town of Milton. Milton Hydro is licensed and regulated by the Ontario Energy Board ("OEB") and operates in accordance with the appropriate Codes and Regulations and within the requirements set out in its Distribution Licence ED-2003-0014. Milton Hydro's distribution service area is 370 square kilometres extending to the boundaries of the Town of Milton of which 313 square kilometres or 85% is a rural distribution system. Milton Hydro serves approximately 26,330 residential, 2,260 General Service <50 kW, 300 General Service >50 kW and 2 Large Use customers.

Milton Hydro contracted with the SeeLine Group Ltd. to assist in the preparation of its CDM Strategy for 2011 to 2014.

## 2 CDM Strategy

As indicated, Milton Hydro plans to meet its CDM targets by delivering OPA-Contracted Province-Wide programs for the four year period starting January 1, 2011. There will be 3 major program areas - consumer, industrial and commercial /institutional.

In addition, it is expected that the OPA will be issuing a CDM program focusing on low-income consumers. Milton Hydro anticipates delivering this program as well. At this point in time, Milton Hydro has not evaluated the potential savings that may result from low-income programs. Upon

receiving further program design details from the OPA, Milton Hydro will be in a position to better estimate potential savings.

Milton Hydro is not including potential Board-Approved CDM Programs (Tier 2 and Tier 3) as part of this CDM strategy document. Milton Hydro plans to investigate and evaluate a number of potential Tier 2 initiatives after the OPA has released the details on all their province-wide programs. An important component of this review will be ensuring that a selected initiative is not a duplicate of the OPA province-wide initiatives. As well, Milton Hydro believes it is important to focus its efforts on the delivery of the suite of OPA-contracted Province-wide programs – particularly in the short-term. Milton Hydro plans to collaborate with other companies including other local distribution companies and natural gas distributors as it contemplates the potential delivery of Tier 2 or Tier 3 initiatives. Milton Hydro will communicate with the OEB should there be any changes to its filed CDM strategy.

Tables 2.1, 2.2 and 2.3 below summarize the kW and MWH savings by year. Table 2.4 displays the milestones and table 2.5 provides a four year summary of the savings by program.

**Table 2.1 Peak Demand kW Savings Summary**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
CDM Peak Demand Reduction Savings	910	2,730	5,300	7,970	N/A

**Table 2.2 Incremental Annual Energy Savings Summary**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
CDM Annual Energy MWH Reduction Savings	1,920	3,777	4,612	4,583	<b>14,892</b>

**Table 2.3 Cumulative Energy Savings Summary**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
CDM Cumulative Energy MWH Reduction Savings	1,920	7,564	17,658	31,967	<b>31,967</b>

**Table 2.4 Milestones Achieved**

<b>Milestone</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Milton Hydro CDM Target</b>
Stage	Stage 1 - programs launch/pilot	Stage 2 - programs settle/provide fine tuning	Stage 3 – programs mature	Stage 4 – program full performance	
% of target MW	11.4%	34.1%	66.3%	99.6%	8.0 MW
% of target MWh	5.6%	16.6%	29.7%	42.1%	34,000 MWh

**Table 2.5 Summary of Demand and Energy Savings**

<b>CDM Programs Source</b>	<b>Peak Demand Reduction (MW) (2011-2014)</b>	<b>Cumulative Energy Reduction (GWH) (2011-2014)</b>
Tier I - OPA-Contracted Province Wide CDM Programs	7,970	31,967
Tier II - OEB-Approved CDM Programs	N/A	N/A
Total (OPA Tier I only)	7,970	31,967

In 2010, Milton Hydro completed its requirements under its Smart Meter Investment Plan and as such Milton Hydro has fully deployed 100% of its Smart Meters. In addition, Milton Hydro is now billing 100% of its Regulated Price Plan (“RPP”) customers on Time of Use (“TOU”) electricity prices. However, at the time of filing Milton Hydro’s CDM Strategy for the years 2011 to 2014, the conservation savings attributed to Smart Meters and TOU billing had not been determined and therefore the demand and energy savings from the implementation of Smart Meters and TOU prices have been excluded from the above targets. When the final CDM results for Smart Meters and TOU prices become available from the OPA, Milton Hydro will include them in its overall targets.

### **3 OPA – Contracted Province – Wide Programs**

Milton Hydro will participate in all OPA-contracted Province-wide programs for the four year period starting January 1, 2011. These include the Consumer Programs, Commercial and Institutional Programs, Industrial Programs and the Low-Income Programs. Milton Hydro will deploy the programs in accordance with the program rules as designed by the OPA. Milton Hydro expects to deliver these programs over the 4 year period beginning January 1, 2011. Milton Hydro will use a combination of in-house resources and contracted delivery agents to delivery the programs. Contracted delivery agents will be used for elements of the programs where it is most appropriate. All

contracted entities will be subject to a tendering process and may be selected in collaboration with other electricity and/or gas distributors.

Milton Hydro understands that the OPA is continuing further development work on the program budgets. As a result, Milton Hydro will not submit program specific budget information at this time, and as indicated above, the absence of the final budgetary values introduces a degree of uncertainty to the program participation estimates. In developing the participation estimates, Milton Hydro did have access to preliminary budgetary values provided by the OPA which formed the basis of the participation values presented herein.

The program descriptions, objectives and Milton Hydro’s basic approach to the market are described in the following sections. It is acknowledged that market approaches and techniques may be refined as the programs roll out and further insights and guidance from Milton Hydro’s partners, customers and the OPA is gained.

### 3.1 Consumer Program

The consumer program will provide incentives to both existing home owners and developers/builders to motivate the installation of energy efficiency measures in both existing and new home construction. The program has a number of initiatives, targeting a variety of activities and channels. Full program details are available on the OPA’s website at <http://icon.powerauthority.on.ca/>. Table 3.1 summarizes the initiatives.

**Table 3.1 Consumer Initiatives and Descriptions**

<b>Initiatives</b>	<b>Description</b>
Instant Rebates	In-store discounts on energy efficient products
Midstream Electronics Incentive	Retail promotion of energy efficient televisions
Midstream Pools Incentive	Retail promotion of “right sized” pool equipment
HVAC Rebates	On-line rebates on high efficiency replacement of heating/cooling systems
Appliance Retirement	Free pick-up/decommissioning of old, working inefficient appliances
Exchange Events	Room air conditioner and dehumidifier exchange events at retailers
Residential New Construction	Incentives for builders to construct efficient, smart, and integrated new homes
Residential Demand Response	PeakSaver

### **3.1.1 Program Objectives**

The primary objectives of Milton Hydro's CDM consumer (residential) program are intended to support the OPA program designs as follows:

- Help consumers improve the energy efficiency of their homes;
- Encourage builders to include more energy efficient products and to build homes to levels of energy efficiency higher than current Ontario Building Code requirements;
- Empower consumers by giving them information (consumption and price) to help them better manage their electricity use; and

To maximize participation, the program provides energy efficiency opportunities for multiple areas of the home and demonstrates to consumers how they are interconnected. This new direction means the marketing is moving from initiative-based to a consumer focus approach that builds on awareness and fact-based education. This will help the consumer make comprehensive choices for energy-efficiency at home, which will contribute to a culture of conservation. The program relies on a combination of customer focused financial incentives, up-stream delivery channel financial incentives, educational and awareness materials and support for training.

### **3.1.2 Approach**

Milton Hydro will deliver the “mass marketing” and retailer components of the consumer program by co-branding the various OPA media based communications including coupons and retailer-focused initiatives. Milton Hydro will also participate in “in-store” campaigns and activities such as the exchange programs, special events, and related awareness activities.

The Appliance Exchange, Appliance Retirement and PeakSaver (Demand Response) initiatives represent a continuation of existing programming efforts. Milton Hydro will partner with the OPA and existing delivery channels to facilitate the delivery of these initiatives.

The Residential New Construction initiative is an important element for Milton Hydro. Milton Hydro is one of the fastest growing distributors in Ontario and as such anticipates working closely with its builder community and the representative association in the roll-out of the program. As there is a significant training requirement also envisioned for new construction as part of a suite of capacity building initiatives, Milton Hydro also expects to support the sector by promoting the training curriculum and assisting with delivery as required.

All consumer initiatives will be supported by Milton Hydro's web-site and a variety of other communications activities. Where appropriate, Milton Hydro will make both staff and other resources available to the OPA and its delivery partners to support a successful delivery of the consumer programs.

**Table 3.2 Consumer (Residential) Program Summary**

<b>Consumer Sector Summary</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
Projected Reductions in Peak Provincial Demand (kW)	420	1,440	2,540	3,620	N/A
Projected Reductions in Provincial Energy Consumption (MWh)	1,241	3,488	5,830	8,146	<b>18,705</b>
Program Budget	N/A	N/A	N/A	N/A	N/A

## **3.2 Commercial and Institutional Programs**

The Commercial, Institutional and Multi-Family (“C&I”) Program is designed to assist building owners and operators as well as tenants and occupants in achieving reduced demand and energy savings, and to facilitate a culture of conservation amongst these communities as well as the supply chains which serve them. This is achieved by offering incentives throughout the continuum of CDM activities including audit and design team incentives as well as end user focused incentive.

Milton Hydro will deploy the eight program components as they apply to all the customer segments in Milton Hydro’s service territory. More focus will be on customer segments that have the largest demand reduction and energy savings potential. Full program details are available on the OPA’s website at <http://icon.powerauthority.on.ca/>. Table 3.2.1 summarizes the initiatives.

**Table 3.2.1 Commercial and Institutional Initiatives and Descriptions**

<b>Initiative</b>	<b>Description</b>
C&I New Construction	Incentives for new buildings to exceed existing codes and standards for energy efficiency
ERIP	The Electricity Retrofit Incentive Program is an incentive program designed to encourage high-efficiency electricity retrofits to existing structures
Power Savings Blitz	Direct install of energy efficiency measures in the premises of small business customers in the General Service <50kW class
Small Commercial Demand Response	Free, installed direct load control devices and display systems/capability. Non-DR offers: subsidized display systems/capabilities
DR1	An initiative where distribution-connected electricity customers voluntary provide DR capabilities to reduce peak demand and increase system reliability
DR3	An initiative where distribution-connected electricity customers provide mandatory DR capabilities to reduce peak demand and increase system reliability.

### **3.2.1 Program Objectives**

The objectives of the program are to:

- Assist owners and operators of C&I buildings, farms, and multi-family residences to achieve reduced demand energy savings through the purchase and operation of energy efficient equipment and through the participation in demand response initiatives;
- Assist owners and operators of C&I buildings, farms, and multi-family residences to find and capitalize on savings potential through the use of audits, feasibility studies and engineering reports;
- Provide education to tenants and occupants, particularly with respect to multi-family buildings, regarding in-suite energy efficiency and demand response opportunities; and,
- Ensure that energy efficiency is an important consideration for any capital improvements projects.

### **3.2.2 Approach**

Milton Hydro will support this program by robust, segment-specific marketing and promotional activities including direct marketing. Milton Hydro intends to use its Customer Information System to target specific niche market opportunities within the sectors such as major retail outlets, shopping

malls and entertainment facilities. Milton Hydro will work closely with existing delivery partners as it seeks to magnify participation in existing initiatives such as ERIP.

Milton Hydro successfully delivered the Power Savings Blitz initiative to small commercial customers. With new technologies now included in the offering, Milton Hydro anticipates both more savings through re-visits to those customers and further lighting based savings from customers who have not participated to date,

All C&I initiatives will be supported by Milton Hydro’s CDM-dedicated staff, its web-site and a variety of corporate communications activities. Where appropriate, Milton Hydro will make both staff and other resources available to the OPA and its delivery partners to support a successful delivery of the consumer programs.

**Table 3.2.2 Commercial and Institutional Program Summary**

<b>Business Sector Summary</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
Projected Reductions in Peak Provincial Demand (kW)	260	670	1,580	2,560	N/A
Projected Reductions in Provincial Energy Consumption (MWh)	678	1,680	3,315	4,741	<b>10,414</b>
Program Budget	N/A	N/A	N/A	N/A	N/A

### 3.3 Industrial Programs

The industrial program will provide incentives to both existing and new industrial customers to motivate the installation of energy efficiency measures. Milton Hydro will deploy the Industrial Program in accordance with the program rules as designed by the OPA. The following table summarizes and describes the elements of the Industrial Program. Full program details are available on the OPA’s website at <http://icon.powerauthority.on.ca/>. Table 3.3.1 summarizes the initiatives.

**Table 3.3.1 Industrial Initiatives and Descriptions**

<b>Initiative</b>	<b>Description</b>
ERIP	The Electricity Retrofit Incentive Program is an incentive program designed to encourage high-efficiency electricity retrofits to existing structures.
DR1	An initiative where distribution-connected electricity customers voluntarily provide DR capabilities to reduce peak demand and increase system reliability
DR3	An initiative where distribution-connected electricity customers provide mandatory DR capability to reduce peak demand and increase system reliability
Industrial Accelerator	Incentives and enabling initiatives aimed at improving the energy efficiency of equipment and production processes

### **3.3.1 Program Objectives**

The primary objectives of Milton Hydro's CDM industrial program are intended to support the OPA program designs as follows:

- Assist industrial customers to achieve reduced demand energy savings through the purchase and operation of energy efficient equipment and through the participation in demand response initiatives;
- Help industrial customers find and capitalize on savings potential through the use of audits, feasibility studies and engineering reports; and,
- Ensure that energy efficiency is an important consideration for any capital improvements projects.

### **3.3.2 Approach**

Milton Hydro will support the OPA industrial initiatives by targeting information and materials directly to its industrial customers and to their representative associations. Industrial CDM projects can be relatively complex, requiring detailed and specific knowledge of both the operations and the various technologies that apply. To effectively deliver this Program to the industrial sector, a proactive sales and marketing strategy will be necessary, requiring the following:

- Key Account Manager's or equivalent contract resources to develop strong customer relationships and to facilitate identification of conservation opportunities and appropriate follow-up;
- Persistence in pursuit of opportunities, given the long sales cycle from project identification to project implementation; and,
- Consistent and reliable technical support, with specific knowledge of target technologies or processes.

It is anticipated that Milton Hydro will need additional resource capability to support the industrial program. This relates to the unique nature of the loads and the need for strong technical capability. Milton Hydro will also seek to partner with the consulting engineering community who are already active in the market and with member supported associations who can offer access to their industrial members. As with the other sectors, Milton Hydro intends to use its Customer Information System to target specific niche market opportunities.

All industrial initiatives will be supported by Milton Hydro’s CDM-dedicated staff, its call centre, its web-site and a variety of corporate communications activities. Where appropriate, Milton Hydro will make both staff and other resources available to the OPA and its delivery partners to support a successful delivery of the industrial programs.

**Table 3.3.2 Industrial Program Summary**

<b>Industrial Sector Summary</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
Projected Reductions in Peak Provincial Demand (kW)	230	630	1,170	1,800	N/A
Projected Reductions in Provincial Energy Consumption (MWh)	2	474	948	1,423	<b>2,847</b>
Program Budget	N/A	N/A	N/A	N/A	N/A

## 4 Program Mix

As indicated, Milton Hydro expects to achieve its CDM targets through the delivery of the Ontario-Contracted Province-Wide Programs. The OPA has released summary CDM guidelines for the residential, commercial and industrial segments with a low income consumer document to be issued at a later date. Milton Hydro has determined that it will participate in these programs and in the underlying initiatives where the initiative aligns with its customer demographics.

As a result of Milton Hydro’s plan to be engaged in the Ontario-Contracted Province-Wide Programs, all Milton Hydro customers will have the opportunity to participate in the various initiatives as appropriate.

In general the OPA programs have been designed to be cost effective and provide meaningful CDM savings. Consequently the programs and initiatives have been developed to optimize CDM impacts by focusing on certain customer classes. Milton Hydro expects to review each CDM initiative and deliver those projects that yield effective CDM savings in their respective customer groups. Table 4.1 shows the various initiatives and their target customer group. As shown, all customers in Milton Hydro’s licensed service area will have access to programs appropriate for their needs.

**Table 4.1 Program Coverage**

<b>Program or Program Element</b>	<b>Residential</b>	<b>Commercial, Institutional, Multi-family Buildings &amp; Farms</b>	<b>Industrial</b>
Instant Rebates	X		
Midstream Electronics Incentive	X		
Midstream Pools Incentive	X		
HVAC Rebates	X		
Appliance Retirement	X		
Exchange Events	X		
Residential New Construction	X		
Residential Demand Response	X		
Residential Low-Income	X		
C&I New Construction		X	
ERIP		X	
Power Savings Blitz		X	
Small Commercial DR		X	
DR1 – Commercial & Institutional		X	
DR3 – Commercial & Institutional		X	
ERIP - Industrial			X
DR1 - Industrial			X
DR3 - Industrial			X
Industrial Accelerator			X

## **5 CDM Programs Co-ordination**

Milton Hydro will continue to strive for CDM efficiencies in program delivery by building both on its strong relationships with its customers and on the current relationships that exist with other distributors in both Halton Region and the province. It is Milton Hydro's goal to continue to enhance this relationship and further explore the synergies within the natural gas distributors in the Halton Region to ensure all customers are served in an efficient and coordinated manner.

Milton Hydro believes that the OPA Province-Wide Programs represent a comprehensive package of programming activities that form the basis for a successful CDM effort. While Milton Hydro is not contemplating an application for Tier 2 or Tier 3 programming at this time, Milton Hydro will assess applications for OEB-Approved programs in cooperation with the other Halton Region distributors and/or as filed by other distributors in the province to identify opportunities for program expansion and the opportunities for synergies and cost savings.