

**Ontario Energy Board**

**Commission de l'énergie de l'Ontario**



# **Natural Gas Demand Side Management Summary Report – 2012 Results**

**Date: February 12, 2014**

## **Purpose**

The Demand Side Management (“DSM”) audit reports for Enbridge Gas Distribution Inc. (“Enbridge”) and Union Gas Limited (“Union”) are primarily technical documents. The purpose of this summary report is to capture the high level 2012 results.

This summary report and the summary report for the 2007 to 2011 period have been posted on the Board’s [Natural Gas Demand Side Management webpage](#).

## **Background**

Enbridge and Union have filed DSM plans with the Board since 1995. The original regulatory framework for natural gas utility-sponsored DSM programs was established through guidelines set out in the E.B.O. 169-III Report of the Board dated July 23, 1993. Until 2006, Union and Enbridge filed DSM plans in accordance with the E.B.O. 169-III Report.

In 2006, the Board conducted the generic DSM proceeding (EB-2006-0021). The 2006 Decision resulting from this proceeding stated that the intent of the proceeding was to “streamline processes, harmonize practices, and re-examine the rules of DSM”. This 2006 Decision became the basis for the multi-year DSM plans of the natural gas utilities.

The Generic Multi-Year DSM Plans that had been approved by the Board in 2006 (EB-2006-0021) expired in December 2009. However, as some government policy issues, namely the impact of the *Green Energy and Green Economy Act, 2009*, had not yet been determined, the Board directed the natural gas distributors in 2009 and 2010 to submit DSM plans based on the existing DSM framework. Subsequently, the Generic Multi-Year DSM Plan was extended until December 2011.

With the expiry of the Generic Multi-Year DSM Plan, the Board initiated a consultation (EB-2008-0346) in order to review the existing DSM framework and develop guidelines to be used by natural gas distributors in developing their next generation DSM plans for 2012 and beyond.

The consultation resulted in the issuance of the DSM Guidelines for Natural Gas Utilities (“DSM Guidelines”) on June 30, 2011. The DSM Guidelines provided for the following changes relative to the previous DSM framework:

- A three-year term that maintained the current level of funding inflated annually, subject to item three (3) below (the 2011 DSM budget for Enbridge was \$28.1 million and the 2011 DSM budget for Union was \$27.4 million);
- A minimum of 15% of the utility's total DSM budget should be allocated to low-income programs;
- The option to increase the total DSM budget by as much as 10%, provided that this incremental spending is allocated to low-income programs;
- The low-income DSM budget to be funded from all rate classes;
- Optional large industrial DSM programs;
- Utility financial incentives that maintain the current level of \$9.5 million, adjusted annually for inflation; and which are calculated in the same manner as lost revenues (i.e. using input assumptions resulting from the most recent evaluation and audit results); and,
- Performance measured by a scorecard approach rather than a Total Resource Cost target.

### **DSM Portfolio**

Enbridge and Union's 2012 DSM program activities fell within three program types:

- Resource Acquisition;
- Low-Income; and
- Market Transformation.

Resource Acquisition programs seek to achieve direct, measureable savings for an individual customer and involve the installation of energy efficient equipment.

Low-Income programs are similar in nature to resource acquisition programs, but are separated to recognize the unique needs of this customer base and that they may result in lower TRC net savings than non-low-income programs.

Market Transformation programs focus on facilitating fundamental changes that lead to greater market shares of energy-efficient products and services. They influence consumer behaviour and attitudes in support of reducing natural gas consumption<sup>1</sup>.

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<sup>1</sup> Union DSM 2012 Annual Report, Page 14

The DSM Guidelines stated that the design of DSM programs and the overall portfolio should be guided by the following three objectives:

- Maximization of cost effective natural gas savings;
- Prevention of lost opportunities; and
- Pursuit of deep energy savings.

### **DSM Programs by Utility**

#### **Enbridge Gas Distribution Inc.**

Some of Enbridge's 2012 DSM programs are described below<sup>2</sup>:

- The *Community Energy Retrofit Program* designed to produce deep energy efficiency savings opportunities in older homes. It employs a holistic approach that encompasses not just natural gas measures but also opportunities to save electricity and water.
- The *TAPS / Energy Savings Kits ("ESK") Program* relied on a contractor to provide the customer with two showerheads, two bathroom aerators and one kitchen aerator for self-installation.
- The *Custom Commercial Program* offered customers incentives for third-party energy audits, equipment retrofits and operational improvements. Measures included capital improvements such as boiler and HVAC retrofits, building automation systems, building envelope improvements, and steam trap replacement.
- The *Prescriptive Commercial Program* offered incentives for various prescriptive and quasi-prescriptive measures including: high efficiency boilers, condensing boilers (under 300 mbh), Energy Star dishwashers, Energy Star fryers, Energy Star steam cookers, high efficiency under-fired broilers, energy recovery ventilators (ERV), heat recovery ventilators (HRV), infrared heaters, demand control kitchen ventilation, ozone commercial clothes washers, showerheads, and air doors.

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<sup>2</sup> Enbridge – 2012 DSM Revised Annual Report

- Both the *Energy Compass* and *Run it Right Initiatives* were designed to move the commercial marketplace towards performance based conservation. They include:
  - Continuous improvement
  - Data-driven decision making
  - Monitoring and reporting on actual overall energy savings

These programs encouraged commercial customers to make data-driven decisions in order to capture energy savings. The acquisition and analysis of detailed energy data allows building operators and managers to make strategic data-driven decisions regarding energy savings and capital investments.

- Enbridge's DSM program for industrial customers encompassed the *Continuous Energy Improvement* initiative as a custom project offering. This program employed a three-pronged approach aimed at providing a complete solution to the customer's energy needs, which included:
  - Energy Solution Consultants
  - Energy Assessments
  - Project Incentives
- The *Weatherization Program* was available to qualified Low-Income Residential, Part 9 building (3 stories or less) tenants and homeowners within Enbridge's franchise who met the program's income eligibility criteria.
- The *Low-Income Multi-Residential Retrofit Program* assisted social housing providers to improve the energy efficiency of their aging buildings. The program takes the building as a system approach to energy efficiency. It targets housing providers, building operators and tenants with a range of measures including enhanced financial incentives, technical information services, building assessments/audits, education, and project facilitation. Education and community sector sponsored outreach are also essential components.

## Union Gas Limited

Some of Union's 2012 DSM programs are described below<sup>3</sup>:

- *Energy Saving Kits* ("ESK") are pre-packaged measures designed to reduce a customer's energy demand and water consumption. Each ESK contains the following components:
  - Energy efficient showerhead (1.25 GPM)
  - Energy efficient kitchen aerator (1.50 GPM)
  - Energy efficient bathroom aerator (1.0 GPM)
  - Pipe wrap (two 1 meter lengths)
  - 1 roll of Teflon tape for ease of showerhead installation
  - ESK Installation Guide and MyAccount paperless brochure
  - \$25 Programmable Thermostat rebate coupon
- *Home Retrofit offering* targeted residential homeowners in need of building envelope, space and water heating upgrades. The offering provides customers with prescriptive incentive amounts for the installation of attic insulation, basement insulation, wall insulation, Energy Star windows, tankless water heaters and high efficiency furnaces. Customers also receive incentives to assist with the costs of the pre and post audits that the program requires to determine the energy savings.
- Union continued to offer a full suite of prescriptive and quasi-prescriptive measures to more than 100,000 commercial customers. These customers encompass eleven main customer segments: office, retail, multi-family, food service, hotel & motel, manufacturing, agriculture, warehouse, entertainment & recreation, education and healthcare and all fall within the commercial rate classes: M1, M2, M4, M5, M7, R01, R10 and R20.
- The *Water Heating Initiative* is designed to reduce a customer's energy use and water consumption and the *Space Heating Initiative* is designed to stimulate customer action to retire older inefficient space heating equipment and install new energy efficient space heating equipment.

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<sup>3</sup> Union – 2012 DSM Annual Report

- The *Commercial Kitchen Initiative* is designed to encourage food establishment owners and operators to install high efficiency technologies and Energy Star cooking equipment which are designed to reduce hot water consumption and/or natural gas.
- Union's custom offering focuses on advancing customer energy efficiency and productivity through providing a mix of custom incentives, education and awareness to commercial and industrial customers across all segments. The objective of the custom offering is to generate long-term and cost-effective energy savings for Union's customers.
- The *Low-Income Program* was designed to reduce the energy burden facing low-income single family and multi-family dwelling customers. In 2012, Union's Low-Income single family offerings consisted of a standalone basic measure offering and a building envelope offering.
- For Large Industrial Rate T1 and Rate 100 customers, the *EnerSmart Program* was designed with a particular focus on achieving savings in a process-specific energy application. The program was marketed directly to customers and indirectly through trade allies, channel partners, Energy Service Companies, engineering firms, and equipment manufacturers. One goal of the program was to cost-effectively promote energy efficiency within Union's Large Industrial Rate T1 and Rate 100 customer base.
- The *Optimum Home Program* was designed to accelerate residential home builder's energy efficiency practices such that they are ready and capable of building homes that meet an increased minimum efficiency standard expected in the next release of the Ontario Building Code in 2017.

## **2012 DSM Results**

The Board's Reporting and Record Keeping Requirements for gas utilities requires the utilities to file an audited report of the actual results each year. The 2012 results of the natural gas utilities are as follows:

**Enbridge Gas Distribution Inc.**

<b>Program Sector</b>	<b>2012 Net Natural Gas Savings (m<sup>3</sup>)<sup>4</sup></b>	<b>2012 Actual Costs<sup>5</sup></b>
Residential	3,346,054	\$2,903,755
Low Income	3,742,311	\$7,126,628
Commercial/Multi Res	34,975,892	\$7,960,641
Industrial	18,071,496	\$2,618,877
Market Transformation	0	\$4,308,518
Overheads	0	\$5,688,092
<b>Total</b>	<b>60,135,753</b>	<b>\$30,606,510</b>

**Union Gas Limited**

<b>Program Sector</b>	<b>2012 Net Natural Gas Savings (m<sup>3</sup>)<sup>6</sup></b>	<b>2012 Actual Costs<sup>7</sup></b>
Residential	2,686,138	\$3,053,693
Low Income	2,842,901	\$7,702,047
Commercial / Industrial	49,127,369	\$11,314,294
Large Industrial Rate T1 and Rate100	82,782,080	\$5,043,295
Market Transformation	0	\$434,823
Portfolio Costs	0	\$3,774,064
<b>Total</b>	<b>137,438,488</b>	<b>\$31,322,216</b>

**Total Combined Natural Gas Savings**

For 2012, the total combined natural gas savings Enbridge and Union accumulated was **197,574,241 m<sup>3</sup>**. This is equivalent to the amount of natural gas used by approximately 90,000 residential homes in a year.

<sup>4</sup> Enbridge – 2012 DSM Revised Annual Report, Table 12, Page 58

<sup>5</sup> Enbridge – 2012 DSM Revised Annual Report ,Table 3, page 14

<sup>6</sup> Union - DSM 2012 Annual Report, Table 3, Page 16

<sup>7</sup> Ibid