# Powering up efficiency to get the conservation framework right

Will the Ontario Energy Board prevent consumers from saving money and Ontario from fighting climate change?

### environmental defence

#### INTRODUCTION

Increasing energy conservation is one of the fastest and most affordable ways to cut our utility bills while reducing pollution.

Better energy efficiency can result in savings, which lower individuals' cost of living and improve the competitiveness of businesses. For example, over a recent 10-year period, Union

Gas' efficiency programs helped its Ontario customers save more than \$1 billion<sup>1</sup> by reducing the amount of energy they used to keep their homes warm and their businesses humming.

In recognition of the multiple economic and environmental benefits that flow from increased energy conservation, Ontario's Minister of Energy Bob Chiarelli recently directed the Ontario Energy Board (OEB) to develop a framework to enable the achievement of all cost-effective conservation.<sup>2</sup> Cost-effective conservation is defined as





The OEB is in the process of developing these new rules, but there are strong signs that it may fall short of realizing the full potential for cost-effective conservation.

The OEB's draft approach has significant shortcomings that must be remedied. It's critical that the OEB rules be consistent with the Minister's directive to protect Ontario's economy, energy consumers and our environment.

#### THE BENEFITS OF ENERGY CONSERVATION

Ontario's gas utilities' conservation programs have already resulted in big savings for Ontario energy customers. For every dollar Ontario's gas utilities have spent on energy conservation, there has been a corresponding \$16.20 in cost savings for customers.<sup>3</sup>

A study conducted by Ontario's leading economic modelling firm, the Centre for Spatial Economics,<sup>4</sup> found that reducing gas use by 16 per cent over a 10 year period would:

- Lead to a \$5 billion increase in provincial GDP
- Reduce the provincial deficit by \$479 million
- Create an additional 33,000 jobs
- Reduce total provincial greenhouse gas (GHG) emissions by 6 per cent.

Natural gas use is one of the largest sources of provincial GHG emissions.<sup>5</sup> Emissions from industry and buildings are largely from the burning of natural gas (see Figure 1). Fortunately, it is also one of the sectors where we can quickly reduce emissions and support a strong economy. Enbridge Gas Distribution, for example, calculates that the GHG emission reductions achieved by its conservation programs over the past 19 years are the equivalent to taking 3.2 million cars off the road.<sup>6</sup>

## Figure 1: Ontario greenhouse gas emissions by sector, 2012



### Emissions from industry and buildings are largely from the burning of natural gas

Source: Environmental Commissioner of Ontario, Looking for Leadership: The costs of climate inaction. Annual Greenhouse Gas Progress Report 2014. (July 2014) p. 33

**Enbridge Gas Distribution** calculates that the GHG EMISSION REDUCTIONS achieved by its CONSERVATION PROGRAMS • over the past 19 years are the equivalent to taking **3.2** MILLION CARS OFF THE ROAD.<sup>®</sup>

Improving efficiency is one of the lowest cost ways we have for meeting Ontario's 2020 greenhouse gas emission targets, an important step in fighting increasingly dangerous – and costly – climate change. Pursuing cost-effective conservation will not cost Ontario economy's any money at all but, as the Centre for Spatial Economics study<sup>7</sup> found, it will lead to real economic gains as a result of increased energy productivity and it would require no lifestyle changes.

As Ontario imports virtually every cubic metre of gas burned in the province, improving our efficiency helps our economy by keeping jobs and revenue in Ontario, instead of sending billions of dollars out of province to pay for imported fuel. It also makes our businesses and industries more competitive by reducing their production costs.



## conservation?

An energy efficiency measure is considered cost effective when the value of the energy savings produced by that measure (such as replacing a furnace) is greater than the cost of the measure itself. For example, if a new furnace costs \$3,000 but saves its owner \$5,000 in gas costs over its lifetime, it is considered cost effective. Energy efficiency opportunities range from installing smart controls like programmable thermostats and adding insulation to replacing industrial pumps and motors with more efficient machinery.

#### **ONTARIO'S CONSERVATION FIRST STRATEGY**

In Ontario, the government recently adopted the concept of Conservation First<sup>8</sup> as one of the pillars of its Long Term Energy Plan. In a nutshell, Conservation First means that we should secure all cost-effective conservation measures before investing in new (or re-built) energy supplies. Conservation First can also

help us to reduce demand for both electricity and natural gas from existing sources by using energy more efficiently.

In March 2014, Ontario's Minister of Energy issued a directive to the Ontario Energy Board (OEB) to develop a framework to "enable the achievement of all cost-effective" gas conservation.9

The OEB has now released a draft framework.<sup>10</sup> However, it contains a number of deficiencies. If these shortcomings are not addressed, the framework will fall short of giving our utilities the tools and incentives they need to capitalize on all cost-effective efficiency measures.

A failure to fully capture all available costeffective conservation will mean that both individuals and businesses in Ontario will continue to pay more than necessary for energy to meet their everyday needs - from a cold beer to a warm house.

#### SHORTCOMINGS OF THE OEB'S DRAFT FRAMEWORK

The draft framework released by the OEB:

- **1 Has altered and weakened the clear language in the Minister of Energy's Directive** that instructs it to "enable the achievement of all cost effective DSM [demand side management, e.g., conservation and efficiency improvements and peak period use reduction]" by adding qualifying language stating "as far as is reasonable and appropriate." This phrase was in the Minister's Directive, but was used in regard to combining electric and gas conservation programs, and was not meant to limit efficiency programs which are already subject to the condition that they be "cost-effective." The OEB must set a primary goal of achieving all cost-effective efficiency gains provided they result in rate impacts that are reasonable.
- 2 Considers that the OEB would set targets for conservation and efficiency programs rather than leaving it to utilities. Utilities have detailed customer knowledge, experience and strong incentive to maximize benefits for their customers. They are in the best position to set targets and budgets. In addition, the OEB is considering a target that would slightly lower the energy savings already being achieved by our gas utilities through their existing conservation programs,<sup>11</sup> which runs counter to the goal of achieving all cost-effective conservation.
- **3** Ignores the value of helping large customers improve their efficiency. The draft standard is considering limiting gas utility efficiency programs to small and medium size customers. This makes little sense as many cost-effective conservation opportunities lie with helping large industrial customers improve their efficiency, especially with longer-term efficiency efforts that can help these industries thrive in Ontario.
- 4 Does not account for the benefits of greenhouse gas emissions reductions when assessing whether an initiative is cost-effective. Ontario is just over halfway to securing the GHG reductions it needs to meet its 2020 climate change targets<sup>12</sup> and the Premier has made it clear that she sets a high priority on picking up the pace of climate action in the face of increasingly costly and damaging storms and flooding.<sup>13</sup> To maximize the gains possible through conservation, the costs of GHG emissions need to be included.
- **5** Does not take into account the job creation potential of strong efficiency programs. Improving energy efficiency has proven to be a strong job creator both for employment directly related to delivering conservation services (e.g. insulation services, new equipment installation, renovation) and by lowering costs for businesses.<sup>14</sup> Yet, the draft framework does not consider this.
- 6 Overlooks charges on customers' bills that reflect actual energy consumption and puts too much emphasis on fixed charges. When individuals and businesses are making efforts to increase their efficiency, they should be rewarded through lower bills. High fixed charges on utility bills (rather than focusing on gas used) undermine this incentive by reducing the savings available through improved efficiency. The OEB needs to adopt smart pricing that rewards efficiency, including strong incentives to reduce energy usage in peak periods.
- 7 Expresses concerns about increasing rates for customers with proposed efficiency program budgets that are so modest they would affect rates by less than two-tenths of one per cent. This is a false economy in any case since cost-effective measures will actually lower customer's bills even if the costs for each cubic metre of gas rise marginally.

Achieving all cost-effective energy efficiency is a win-win-win for Ontario. It will lower bills for Ontario consumers and businesses, create jobs, drive economic growth, and reduce climate pollution and other emissions from energy use.

Ontario's Energy Minister must ensure the OEB properly implements his government's vision of energy efficiency leadership. Otherwise, Ontario consumers – both individuals and businesses – will continue to have higher natural gas bills than necessary and Ontario will have great difficulty meeting its greenhouse gas emissions reductions commitments.

## Keeping up with the efficiency leaders

Across North America, a growing number of utilities, governments and businesses are recognizing the benefits of conserving natural gas. Gas utilities in Massachusetts and Vermont, which are mandated to acquire all cost-effective efficiency, have secured annual energy savings for their customers that are 35-65 per cent higher than what the Ontario Energy Board is currently proposing for Ontario (See Figure 2.)<sup>15</sup> At a national level, U.S. President Obama has set a goal of doubling the energy efficiency of the U.S. economy by 2030.<sup>16</sup> But it's not just utilities and government that understand the value of conserving natural gas. Businesses understand it too. For example, the Canadian Manufacturers and Exporters have stated, "Recognizing that energy is a central cost-driver for many manufacturers, CME has been and remains a strong proponent of conservation."

"Energy Efficiency is widely recognized as a key option in the hands of policy makers but current efforts fall well short of tapping its full economic potential."

- International Energy Agency, 2013<sup>17</sup>

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 Canadian Manufacturers and Exporters submission to the OEB



#### Figure 2: Comparing OEB proposals with actions in Massachusetts and Vermont, Gas DSM Program Savings as Percentage of Retail Sales

Source: Concentric Energy Advisors, Review of Demand Side Management (DSM) Framework for Natural Gas Distributors: Supplemental Report, September 15, 2014.

#### **ENDNOTES**

- 1. Marbek Resource Consultants, 2008 Natural Gas Energy Efficiency Potential Study with 2011 Summary Report Update, Submitted to Union Gas Ltd, July 2011, p. 7 (EB-201 1-0327, Exhibit A-i-K).
- 2. Minister's Directive To the Ontario Energy Board, March 26, 2014
- 3. Ontario Clean Air Alliance Research, An Energy Efficiency Strategy for Ontario's Homes, Buildings and Industries (October 2011) p. 10
- 4. Centre for Spatial Economics, The Economic Impacts of Reducing Natural Gas Use in Ontario, April 2011.
- 5. Environmental Commissioner of Ontario, Looking for Leadership: The costs of climate inaction. Annual Greenhouse Gas Progress Report 2014. (July 2014) p. 82
- Enbridge Gas Distribution. Response to Draft Report of the Board and Draft Filing Guidelines with respect to the Demand Side Management Framework for Natural Gas Distributors (Submitted Oct. 15, 2014). p. 4
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- 11. Draft Report of the Board and Draft Filing Guidelines with respect to the Demand Side Management Framework for Natural Gas Distributors Board File No. EB-2014-0134, p. 14, table 2.
- 12. Environmental Commissioner of Ontario, Looking for Leadership: The costs of climate inaction. Annual Greenhouse Gas Progress Report 2014. (July 2014) p. 32
- 13. See Mandate letter to the Minister of Environment and Climate Change. <u>https://www.ontario.ca/government/2014-mandate-letter-environment-and-climate-change</u>
- 14. Blue Green Canada, More Jobs, Less Pollution: Why Energy Conservation is Common Sense for Ontario. 2013
- 15. Concentric Energy Advisors, Review of Demand Side Management (DSM) Framework for Natural Gas Distributors: Supplemental Report, (September 15, 2014), pp. 5 and 7
- Washington Post, "Obama wants to double U.S. energy efficiency by 2030. Is that possible? Feburay 13, 2013. Available at: <u>http://www.washingtonpost.com/blogs/wonkblog/wp/2013/02/13/obamawants-to-double-u-s-energy-efficiency-by-2030-how-is-that-possible/</u>
- 17. International Energy Agency (IEA), "World Energy Outlook Special Report: Redrawing the Energy-Climate Map", 2013



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