

Memo to: Ontario Ministry of the Environment

From: Ontario Clean Air Alliance Research Inc.

Re: Environmental Bill of Rights Registry Number: 011-7940: *Greenhouse Gas Emissions Reductions in Ontario: A Discussion Paper*

Date: April 19, 2013

---

Ontario's draft discussion paper on a Greenhouse Gas Reduction Strategy properly identifies improving energy efficiency as a key way in which the province can reduce greenhouse gas (GHG) emissions. However, we are concerned that the paper fails to recognize the full potential of improved energy efficiency and sets (or accepts) only modest targets for improvement.

For example, the paper calls for a modest 5% improvement in industrial energy efficiency over five years. Research cited in the discussion paper makes it clear that this is an unambitious target that will leave Ontario industries lagging their competition when it comes to energy productivity.

By contrast, President Obama has called for the United States to cut its energy waste by 50% and double its energy productivity by 2030.<sup>i</sup> Energy productivity investments can simultaneously lower residential energy bills; create jobs; make our manufacturing industries more competitive and reduce GHG emissions,<sup>ii</sup> making this an ideal way to address the Ontario Government's concern that its strategy "Achiev[e] absolute reductions in greenhouse gas emissions in a cost-effective way that considers competitiveness . . . "

Ontario has a huge untapped energy efficiency potential since our energy consumption per person is 50% higher than that of New York State.<sup>iii</sup>

The State of California requires that its electric and gas utilities pursue all of their cost-effective energy conservation and efficiency opportunities. Specifically, the state's "loading order" requires utilities to first meet their "unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible."<sup>iv</sup> New York State has a similar provision in its 2013 New York State Energy Plan, which includes the direction to "Identify policies and programs *designed to maximize* cost-effective energy efficiency and conservation activities to meet projected demand growth"<sup>v</sup> [emphasis added].

In Ontario, Enbridge Gas Distribution and Union Gas have developed some of North America's most cost-effective energy conservation programs. Specifically, the two gas utilities' energy conservation programs are reducing their customers' bills by \$3.1 billion for a cost of only \$191 million. That is, for every dollar of utility spending, their customers are receiving \$16.2 dollars in bill reductions.<sup>vi</sup>

Unfortunately the Ontario Power Authority (OPA) and the Ontario Energy Board (OEB) have established red tape and perverse financial incentives to limit the ability and the profit incentive for Ontario's electric and gas utilities to pursue all of their cost-effective opportunities to lower their customers' bills. For example:

- The OEB has arbitrarily capped the energy conservation budgets of Enbridge and Union Gas at approximately \$30 million per year each despite the fact that larger budgets would lead to much larger bill savings – and emission reductions -- for their customers.
- The OEB’s “No Competition, Entrepreneurship and Innovation Rule” prohibits Hydro One and our municipal electric utilities from modifying or expanding an existing OPA program to make it better, more comprehensive and/or more successful. In addition, the OEB’s rule prohibits the electric utilities from developing their own energy efficiency programs that are similar to, but an improvement on, an OPA program.
- The OPA is offering Hydro One and our municipal electric utilities profit bonuses for under-spending their energy conservation budgets. To add insult to injury, the OPA will provide them with profit bonuses even if they fail to achieve their OEB-mandated minimum energy savings targets. For example, Toronto Hydro can earn a profit bonus of up to \$8.5 million from the OPA for under-spending its energy conservation budget even if it fails to achieve its minimum energy conservation targets established by the OEB.<sup>vii</sup>

To achieve the GHG reduction targets outlined in the paper, we must remove these barriers and disincentives to improving energy efficiency and develop ambitious, integrated programs to help consumers, industries and commercial enterprises to dramatically improve their energy productivity and reduce emissions.

## Specific concerns about the discussion paper

The discussion paper raises some specific concerns that we believe must be addressed to assure there is not a large disconnect between targets and action to achieve them. We outline some of these below before moving on to the specific questions raised by the paper:

*From the paper: “Emissions associated with transportation and residential heating fuels are not currently part of Ontario’s reporting regulation and are not proposed to be included in the greenhouse gas emissions reduction program at this time.”*

Residential heating fuel related-emissions are a major component of Ontario’s greenhouse gas emissions and must be addressed if we are to have any chance of achieving the targets set out in the paper. As noted above, Enbridge and Union Gas have the expertise and knowledge to help homeowners dramatically reduce these emissions and the technology needed is largely “off the shelf”: increased insulation and draft proofing; improved HVAC equipment; improved lighting; greater use of waste heat recovery technologies; and greater use of alternative energy sources, such as geothermal and solar thermal and PV.

*From the paper: “The ministry is considering including emissions from the electricity sector in its program.”*

While phasing out coal-fired generation has dramatically reduced total GHG emissions from the electricity sector, it remains a major emissions source and it is hard to understand why there would be any chance the sector would be excused from the proposed program. There are significant opportunities to reduce emissions from natural-gas fired electricity generation by increasing use of combined heat and power generation; making much greater efforts to reduce peak electricity demand; making much greater use of alternative zero-emission generation sources; and by generally improving electricity efficiency. Simply banking on costly and time consuming nuclear refurbishment projects to eventually offset gas emissions would be a mistake. As we saw in the 1990s, lack of reliability in the nuclear sector can lead to large spike in reliance on fossil-fuel fired generation.

*From the paper: "The aggregate targets for all LDCs are 1,330 megawatts of provincial peak demand savings and 6,000 gigawatt hours of cumulative energy by the end of 2014."*

As the Environmental Commissioner noted in his most recent report on electricity conservation in Ontario, there is little chance that current programs will allow us to reach this peak demand target. And while there is somewhat more optimism about reaching the cumulative target, this is by no means assured.

Just as importantly, a recent academic review of Ontario's electricity conservation and demand management efforts found that the province's target "doesn't appear very ambitious" and placed the province behind 17 of 50 U.S. States for the ambition of its energy use reduction target. The report goes on to note the importance of setting ambitious "stretch" targets to spur action and innovation: "The rationale for setting aggressive targets for energy savings from CDM is that research shows that setting specific and challenging goals leads to higher performance than setting easy goals, "do your best" goals, or setting no goals at all."<sup>viii</sup>

To seriously improve energy efficiency and reduce GHG emissions, we need to set more ambitious conservation targets and give utilities the right incentives and program flexibility to deliver the needed savings.

*From the paper (referring to industrial emission targets): The proposed reduction target of five per cent over five years is achievable based on historic trends.*

Given the scale and urgency of the climate crisis, simply proceeding with targets that reflect "historic trends" is clearly not going to be enough. Again, setting easily achievable targets will do little to spur innovation or action beyond already planned measures. Given that Canada already lags much of the world (including China) in energy productivity, setting weak targets for reducing industrial emissions is sending the wrong signal about the huge value of using energy more efficiently.

## Questions posed by the paper

1. What sectors should be covered under a greenhouse gas emissions reduction program?

The program should apply to new homes and commercial buildings in recognition of their significant contribution to emissions. The program should also address emissions from existing homes and buildings, where emissions inventory information can be easily extrapolated from existing utility data. The electricity sector should most definitely be included as well. A narrowly focused program that deals only with large final emitters will not achieve the targets set out by the government.

2. What emissions threshold should be used for covering facilities in the program?
  - a) Ontario's reporting threshold of 25,000 tonnes of greenhouse gases per year
  - b) A higher threshold such as the federal reporting threshold of 50,000 tonnes per year

The lower threshold is obviously more appropriate, but the concern, again, is that more dispersed emission sources will simply be ignored, resulting in failure to reach targets.

3. What are the barriers to achieving significant reductions?

Many of the barriers involve weak financial signals around using energy more efficiently. We have outlined some of these in opening section of our response.

4. How could a program be designed to encourage investment in cleaner production?

A significant step would be to make increasing energy efficiency our first priority, ahead of adding new energy generation or other energy supply sources. We can start by paying a fairer rate for industrial / commercial energy efficiency measures. A rate equivalent to that currently paid for power from the Bruce A station – 7.4 cents per kWh – would reflect the many advantages of meeting our energy needs through increased efficiency.

5. How could a program be designed to address competitiveness concerns within and across sectors?

By creating a level playing field where all sectors can tap into low cost financing and/or appropriate payment rates for energy efficiency measures. A much more ambitious energy efficiency effort will lead to increased competitiveness for all sectors.

6. How can a program be designed to integrate with Ontario's approach to reducing air contaminants?

An emphasis on dramatically improving energy efficiency has the added advantage of leading to a reduction in criteria air contaminants and toxins from electricity generation, natural gas combustion, and industrial processes. This is one of the multiple advantages of making energy efficiency the No. 1 priority for meeting our energy-related needs.

7. How can facilities achieve an emissions reduction of five per cent over five years?

There are a huge array of technologies and approaches that facilities can access to achieve this modest reduction. Giving utilities appropriate incentives and reducing red tape can lead to the provision of the expert assistance and financing that facilities need to implement the many proven efficiency measures available today.

8. What is your perspective on the importance of equivalency and ensuring industry is not subject to duplicate regulation?

Equivalency can rapidly lead to a "lowest common denominator" regime. The federal government's regulations for reducing emissions from coal-fired generation, for example, are weak and likely to be largely ineffectual. Ontario must focus on drafting regulations that will actually lead to achieving its targets. By focusing on improving productivity and efficiency, stricter regulations do not have to compromise competitiveness or create a burden on industry. In fact, they can create a level playing field where all benefit from improved productivity and lower costs.

---

<sup>i</sup> The White House, *The President's Plan For A Strong Middle Class & A Strong America*, (February 12, 2013).

<sup>ii</sup> Alliance To Save Energy, *Doubling U.S. Energy Productivity by 2030*, (February 7, 2013).

<sup>iii</sup> Ontario Clean Air Alliance, *An Energy Efficiency Strategy For Ontario's Homes, Buildings and Industries*, (October, 2011), page 1.

<sup>iv</sup> California, *Energy Efficiency Strategic Plan: January 2011 Update*, page 1.

<sup>v</sup> <http://www.nyserda.ny.gov/BusinessAreas/Energy-Data-and-Prices-Planning-and-Policy/2013-State-Energy-Plan/Planning-Objectives.aspx>

<sup>vi</sup> *An Energy Efficiency Strategy For Ontario's Homes, Buildings and Industries*, page 10.

<sup>vii</sup> *An Energy Efficiency Strategy For Ontario's Homes, Buildings and Industries*, Appendix A.

<sup>viii</sup> Mallinson, Rebecca *Electricity Conservation Policy in Ontario: Assessing a system in progress*. York University, 2013, p. 11 & 32