

RESTORING BALANCE

A Review of the First Three Years of the Green Energy Act

Annual Energy Conservation Progress Report – 2011 (Volume One)

S U M M A R Y



INTRODUCTION



The Environmental Commissioner of Ontario (ECO) is required under the *Environmental Bill of Rights, 1993* to report annually to the Speaker of the Legislative Assembly of Ontario on the province's progress in energy conservation. For Volume One of our 2011 energy conservation report, the ECO has chosen to review progress on the signature energy policy produced by this government, the *Green Energy and Green Economy Act, 2009* (GEA).

The government's news release announcing the GEA declared two equally important purposes: "making it easier to bring renewable energy projects to life, and fostering a culture of conservation by assisting homeowners, government, schools and industrial employers to transition to lower energy use." The government also enumerated the items below as the most notable elements of the GEA that would support the culture of conservation:

1. North American leading energy efficiency standards (Energy Star) for household appliances, including efficient use of water
2. Mandatory home energy audits prior to sale of homes
3. Making energy efficiency a central tenet of Ontario's Building Code
4. Green Ontario government and broader public sector buildings; including the development of conservation plans

In the three years since the GEA became law, there has been much activity supporting renewable energy generation, as is evident by the creation and refinement of the province's Feed-in Tariff (FIT). In the ECO's view, much less effort has been directed at the conservation-related provisions and policies of the Act. Overall, the ECO believes that the conservation promises of the GEA remain unfulfilled and possibly still years away from completion. Some commitments (like taking a leadership role in appliance efficiency standards or requiring disclosure of home energy use through efficiency ratings) appear to have been quietly abandoned.

Considering the GEA's stated purpose to "encourage energy conservation," the bold new plan has given way to caution and timidity. Given this state of affairs, the government should issue a status update containing firm dates for the delivery of the conservation elements of the GEA from the ministers of energy and infrastructure. This would confirm the government's intentions to build a culture of conservation and set the stage for the completion of the conservation commitments of the GEA. Action is needed to restore the balance of the GEA's twin purposes, advancing conservation as forcefully and effectively as the province has promoted and supported renewable energy generation.

LEADING ENERGY EFFICIENCY PRODUCT STANDARDS

“North American leading energy efficiency standards (Energy Star) for household appliances, including efficient use of water”

There is little evidence that the Ontario government has given product energy efficiency standards a high priority since 2009. Energy efficiency standards set a minimum energy efficiency level that a product must meet to be legally sold. Over time, as technology improves and products become more energy-efficient, the bar is typically raised by increasing minimum efficiency standards.

In the three years since the GEA was passed, the Ontario government :

- Retreated from its promise to set premium efficiency standards for appliances;
- Delayed the implementation date for banning inefficient light bulbs; and
- Failed to update Ontario’s energy efficiency regulations to harmonize them with existing Canadian or U.S. requirements.

The ECO believes that minimum efficiency standards can and should play an important role in reducing energy consumption and greenhouse gas emissions in Ontario, complementing conservation programs. The ECO believes that the Ministry of Energy missed an opportunity to save Ontarians energy and money by not following through on its intention to set ENERGY STAR® equivalent standards for major appliances shortly after the passage of the GEA. For example, ENERGY STAR® products for refrigerators, clothes washers, and dishwashers had become the default choice for most consumers. Raising Ontario’s minimum standards for those products to ENERGY STAR® levels would have yielded energy savings while doing little to restrict consumer choice or raise costs.

Given the large gains already made in the efficiency of major appliances, other products may now offer greater opportunities for Ontario to advance the standards-setting agenda. The Ministry of Energy should lead an analysis to identify which products offer the most promising opportunities for saving energy in Ontario by raising or introducing minimum energy performance standards. For these products, Ontario should attempt to work with the federal government to strengthen national standards, and, if unsuccessful, act alone.

The ECO recommends that the Ministry of Energy set North American-leading energy efficiency standards for key products with the greatest potential for Ontario to save energy.



HOME ENERGY AUDITS

“Mandatory home energy audits prior to sale”



The intent of this commitment was to make the energy efficiency of a home transparent through a rating provided prior to the sale of the home. This helps buyers understand a home’s energy use and on-going operating costs – what is sometimes referred to as the “second bill” of a home purchase. During consultation, both strong support and opposition for this commitment was expressed by stakeholders, and the GEA was amended prior to passage to accommodate the diverse views.

In the last three years, very little activity has occurred on home labelling at time of sale. Although the GEA was passed in May 2009, the section related to mandatory home energy efficiency disclosure has not yet been proclaimed into force, and no action appears forthcoming. In response to an information request, the Ministry of Energy has indicated it does not currently intend to bring the provision for mandatory home energy disclosure into force.

The ECO believes that the public interest is not being served by the government’s inaction on mandatory home energy audits. The interests of homeowners are harmed by the lack of transparency related to energy use in the home. As a society, we no longer tolerate a lack of disclosure with respect to the energy performance of other products such as vehicles and appliances. It should be no different for home ownership, the largest economic commitment most people make in their lives. The ECO believes mandatory home energy labels are necessary to increase residential energy awareness and provide home buyers with the necessary information to factor environmental and operating energy costs into an assessment of a home’s value.

The government’s commitment to foster a culture of conservation, as intended with the GEA, remains incomplete. The ECO urges the Ministry of Energy to reaffirm its commitment to conservation in the residential sector and ensure potential home buyers are provided the information and protection as proposed in the GEA.

The ECO recommends that the government proclaim and implement the provision for mandatory home energy efficiency disclosure in the *Green Energy Act, 2009*.

STRENGTHENING THE BUILDING CODE

“Making energy efficiency a central tenet of Ontario’s Building Code”

The Ontario Building Code sets mandatory provisions that must be met by all new buildings. Since it affects the energy consumption of all new buildings, the Building Code is one of the most important conservation tools available to the Ontario government.

A great deal of activity has taken place in the three years since the passage of the GEA. The Ministry of Municipal Affairs and Housing (MMAH) has implemented provisions in the Code that result in large improvements in building energy efficiency as of 2012. The ECO commends MMAH for the smooth implementation and for not retreating from the original energy goals. To improve the next edition of the Building Code, MMAH established the Building Code Energy Advisory Council which has played a major role in shaping energy efficiency proposals and also released a discussion paper with the proposed changes for public comment. Some of the new proposals include requiring: programmable thermostats; duct sealing; low-flow showerheads; and, more controversially, for houses to be “solar-ready” (i.e., accommodate for a future solar hot water or solar electricity system).

The ECO is generally pleased with progress on the Building Code and believes that the government has met the original intent of this GEA promise. The ECO supports the intention of the proposals for the next Building Code to continue improving building energy efficiency, and encourages MMAH to move forward with a decision in a timely fashion.

However, the ECO is concerned that the review period for the energy efficiency provisions in the Code (every five years) is too long. For example, there has been an explosion in the development of condominiums in the City of Toronto, many of which have been built with very high levels of glazing (“glass boxes”) and are poor energy performers. Had MMAH accepted a 2007 request from the city to fast track the 2012 Code requirements, the province could have reduced the number of high-rises whose poor energy performance is now locked in for decades to come.

The ECO recommends that the Ministry of Municipal Affairs and Housing review energy conservation amendments to the Ontario Building Code more frequently than the current five-year cycle.



GREENING THE ONTARIO GOVERNMENT AND BROADER PUBLIC SECTOR

“Green Ontario government and broader public sector buildings; including the development of conservation plans”

Under the GEA, the Ontario government can require public agencies (which include government ministries and the Broader Public Sector - municipalities, post-secondary institutions, schools boards, and hospitals) to:

- Achieve energy conservation targets;
- Consider energy conservation and efficiency when making capital investments or acquiring goods and services; and
- Prepare energy conservation plans.

The government has made measurable progress on its commitment to green the Ontario government and the Broader Public Sector.

For the Broader Public Sector, the provincial government has issued a regulation requiring annual reporting on energy consumption and greenhouse gas emissions beginning in 2013 and five-year energy conservation plans by 2014.

The ECO strongly supports the decision to require annual reports and five-year plans from the Broader Public Sector. The ECO believes that the annual reporting template (which has yet to be finalized) should allow other energy use information, such as fleets and street lighting, to be voluntarily submitted by public agencies. Tracking and reporting on these forms of energy consumption would drive additional conservation efforts.

The ECO recommends that the Ministry of Energy expand the annual energy reporting requirements for the Broader Public Sector to include fleets and other key energy-consuming operations.

For the Ontario government, the Minister of Infrastructure is expected to issue a directive requiring government ministries to report on energy, emissions and water use by the fall of 2012. The ECO is concerned with the delay in



issuing the directive for reporting requirements for government ministries. A strong conservation plan could make the government a leader and serve as a model for the Broader Public Sector.

The ECO recommends that the Minister of Infrastructure issue a directive requiring annual, public reports of energy consumption for all government ministries and an energy conservation plan for the Ontario government by the end of 2012.

The ECO believes the tracking of real-time energy consumption data could promote load shifting and reduce peak energy demand in public agencies. Information related to greenhouse gas emissions for Ontario's electricity sector will provide interested electricity consumers, including public agencies, with information that can assist them with estimating their carbon footprints. This can promote electricity use when demand is lower, thereby avoiding construction and use of fossil-fueled peaking power plants.

The ECO recommends that the Independent Electricity System Operator make publicly available the greenhouse gas emissions factors for Ontario's electricity consumption on an hourly basis.

OTHER CONSERVATION ELEMENTS IN THE GREEN ENERGY ACT

The GEA included additional legislative amendments that would promote and sustain energy conservation.

Ratepayer Funding for Government Conservation Programs

Legislation was amended to require the Ontario Energy Board (OEB) to issue assessments against electricity and natural gas distributors that would recover the costs associated with the government's energy conservation and renewable energy programs. The government passed a regulation that set the assessment at almost \$54 million for the 2009/10 fiscal year and the OEB issued the assessment accordingly. Unfortunately, the Ontario government has subsequently terminated all of its own conservation programs, and there is currently no need to use this regulatory power.

Conservation Targets for Electricity Distributors

The GEA enabled the Minister of Energy to issue directives to the OEB requiring it to set conservation targets for electricity distributors as a licence condition. Although the directive has been issued and the targets have been set, the ECO remains uncertain that the distributor targets will be achieved. It is almost half way through the 2014 target period and the OEB has only recently finalized the complete set of rules from which electricity distributors can apply for customized conservation programs.

Promoting Conservation through the Ontario Energy Board

The objectives for the OEB were amended to explicitly include the promotion of electricity and natural gas conservation. However, as the ECO has previously stated, recent rulings by the OEB in both the natural gas and electricity sectors have been indifferent and even hostile towards conservation, the opposite of what the government intended when the OEB's objectives were amended.

The Smart Grid

The GEA made amendments to the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998*. These amendments gave the government power to make regulations governing the smart grid and made facilitating the implementation of a smart grid a new objective for the OEB. The Minister of Energy has since issued a directive to the OEB requiring it to take steps to establish, implement and promote a smart grid. In response, the OEB has established a Smart Grid Working Group to provide technical advice, and issued an OEB staff discussion paper. However, the ECO remains concerned with the lack of an integrated plan and clear leadership focused on producing timely results.



The **Environmental Commissioner of Ontario** is the province's independent environmental watchdog. Appointed by the Legislative Assembly, the ECO is tasked with monitoring and reporting on compliance with the Environmental Bill of Rights, and the government's success in reducing greenhouse gas emissions and in achieving greater energy conservation in Ontario.



Download the report **Restoring Balance, A Review of the First Three Years of the Green Energy Act: Annual Energy Conservation Progress Report — 2011 (Volume One)** at

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