

Ministry of Energy
Statement of Environmental Values Consideration Form

EBR Number

012-8840

TITLE

Planning Ontario's Energy Future: A Discussion Guide to Start the Conversation.

Principles of environmental protection, sustainable development and energy conservation, as outlined in the Ministry of Energy's Statement of Environmental Values (SEV), should be considered in the context of this proposal/decision. Please provide a rationale describing either:

- How the principles were considered, OR
- Why the principles are not applicable to this proposal/decision, OR
- Why it is not possible to take a specific SEV guiding principle(s) into account at this time.

Consideration of the SEV should occur early in the decision-making process. The completed form should also be included as part of the approval process by senior management.

Background and Description of the Policy

On October 26, 2017, the Ontario government released the 2017 Long-Term Energy Plan (LTEP), *Delivering Fairness and Choice*.

The Ministry followed the planning process outlined in the *Electricity Act, 1998*, taking into account the legislated objectives of cost-effectiveness, reliability, clean energy, community and Indigenous engagement, and an emphasis on conservation and demand management.

The 2017 LTEP takes a broad look at Ontario's energy system including both the electricity and fuels sectors. The 2017 LTEP focuses on the affordability and reliability of a clean energy supply, giving consumers more choice in the way they use energy, while offering ways to conserve energy. Some key elements of the LTEP related to the environment.

- Nearly \$70 billion has been invested in Ontario's electricity system since 2003.
- Ontario's investments in clean generation sources - water, nuclear, wind, solar, bioenergy - along with the elimination of coal-fired electricity generation, have significantly reduced GHG emissions. Eliminating coal reduced the province's GHG emissions by 30 megatonnes - the equivalent of removing seven million cars from Ontario's roads.
- Conservation programs and improved codes and standards since 2006 helped reduce electricity consumption by about 9 per cent in 2016.
- Ontario's electricity sector is forecast to account for only about two per cent of Ontario's total GHG emissions in 2017 and the emissions are forecast to be more than 80 per cent below 1990 levels.

- Ontario's electricity system is well-poised to serve the people of Ontario over the next 20 years. The 2017 LTEP forecasts that electricity demand will be relatively steady over the planning period.
- In the longer term, the Independent Electricity System Operator (IESO) projects an increase in overall demand as electrification of the economy increases. The outlook assumes the equivalent of approximately 2.4 million electric vehicles by 2035 and includes demand from new electrified transit across the province.
- Emissions are expected to remain well below historical levels and to be relatively flat over the planning period of 2017-2035.
- Ontario will continue to look for ways to keep GHG emissions in the electricity sector low.
- The 2017 LTEP recognizes that fuels are an important component of the province's economy and Ontario is committed to transitioning to a low-carbon economy.
- Ontario's cap and trade program as well as initiatives in the Climate Change Action Plan will support the transition from conventional fuels to renewable and lower-carbon sources.

The Minister of Energy issued directives to the IESO and the Ontario Energy Board (OEB) to develop implementation plans to meet objectives outlined in the 2017 LTEP. The IESO and OEB will submit their plans to the Minister for approval by January 31, 2018.

Environmental Impacts of Energy Sources

How does the proposal/decision consider the differing environmental impacts of energy sources and technologies, including greenhouse gas emissions? Does it provide opportunities for increased use of cleaner sources of energy?

The 2017 LTEP builds on the significant investments the province has already made to green the electricity system.

In 2014, Ontario eliminated coal-fired electricity generation — which was the single-largest climate change initiative completed in North America. In 2016, Ontario's electricity production was over 90 percent emissions free. Within the energy sector, the LTEP highlights ways to continue to drive down emissions such as introduction of renewable natural gas, and additional conservation and energy efficiency. Further, Ontario is now well positioned to use its clean and reliable electricity system to decarbonize other sectors, such as transportation.

The success of the Feed-In Tariff (FIT) and microFIT programs has helped Ontario reach approximately 16,400 MW of renewable energy generation capacity online. In just two years

following the release of the 2013 LTEP, GHG emissions from electricity production declined to 7.1 Mt in 2015, a reduction of 35 per cent. In 2017, Ontario's electricity sector is forecast to account for only about two per cent of Ontario's total GHG emissions and emissions are forecast to be more than 80 per cent below 1990 levels.

Ontario released a 5-year Climate Change Action Plan (CCAP) in June 2016 that outlines what approaches the government intends to take to reduce carbon emissions in the province. The 2017 LTEP continues to prioritize greenhouse gas reductions and is consistent with commitments made in the CCAP. Provisions of CCAP were incorporated into 2016-2020 forecasts contained in the electricity and fuels technical reports which informed the LTEP.

Ontario is enhancing its market-based approach to reduce electricity supply costs and increase flexibility. The IESO has begun a Market Renewal initiative to redesign the province's electricity markets. This undertaking is expected to save up to \$5.2 billion between 2021 and 2030 and forms a key component of the government's plan to bring down the cost of electricity. Market Renewal will be aligned with the objectives of Ontario's CCAP, and will be designed to meet system needs, reduce ratepayer costs and reduce GHG emissions. The IESO, together with its sector partners, has identified the need to ensure that this new framework can properly value environmental attributes and the benefits they provide to the system.

Ontario is also enhancing the province's net metering framework to enable third party ownership of net metered facilities. This will give businesses and consumers more opportunities to generate and use renewable electricity. In conjunction with the Ministry of Energy, the IESO will be developing a program to support a select number of innovative renewable distributed generation projects, including virtual net metering demonstration projects. These projects will inform future grid modernization and net metering policy that will support the continued use of renewable generation on the grid.

In addition to these initiatives, Ontario is responding to the challenge of climate change by phasing out Combined Heat and Power supplied by fossil fuels, exploring how to integrate existing conservation programs with new low carbon GreenON programs, using our clean electricity system to decarbonize the transportation sector, and shifting to renewable natural gas, power-to-gas and lower carbon gasoline and diesel.

Conservation and Energy Efficiency

How does the proposal/decision consider options to reduce energy consumption and promote energy conservation and efficiency? How does the proposal/decision support the development of a strong conservation culture among all Ontario residents, and ensure that consumers can make informed decisions about their energy use?

The LTEP provisions of the *Electricity Act, 1998* specifies that conservation is one of the key objectives that should be considered by the LTEP.

Since the 2013 LTEP, the government, its agencies, and electricity and natural gas distributors have been putting Ontario's Conservation First policy into effect. Conservation is the cleanest and most cost-effective energy resource. It also offers households and businesses a way to manage their energy bills and reduces the need to build new energy infrastructure.

The 2017 LTEP strengthens Ontario's commitment to putting conservation first, both as a resource for the energy system and as a tool for consumers to manage their energy costs.

The government and its agencies will continue to assess the achievable potential for energy conservation, encourage energy efficiency on the distribution system, explore how to integrate existing conservation programs with new Green Ontario Fund programs, and empower consumers with access to data and tools, such as through the Green Button initiative. The transition to a capacity auction will present opportunities for demand response to grow further and compete with other resources, based on system needs.

Social, Economic and Other Considerations

How does the Ministry of Energy integrate social, economic and other considerations along with the SEV, in making its decisions?

Across the province, electricity customers experience different rates of growth and have different energy needs. Regional planning is the process designed to link provincial and local planning. The current regional planning process was formalized in May of 2013. Since the 2013 LTEP, all 21 regions have initiated or completed their first cycle of the formalized process. With the release of CCAP, there is an opportunity to consider how the regional planning process supports and considers the impact of various electricity growth scenarios.

Indigenous communities are critical partners in the province's energy sector. There are over 150 First Nation and Métis communities across Ontario with credibly asserted or established Aboriginal and treaty rights. Energy activities have the potential to affect these rights, as well as the socio-economic wellbeing of communities. Ontario is committed to engaging with Indigenous partners as it implements the LTEP. Ontario looks to First Nation and Métis communities and organizations, developers and other key partners to share their interests and provide the ideas and guidance that will strengthen implementation of this policy priority.

The LTEP highlights the initiatives designed to minimize the impact of energy investments and help Ontarians manage their electricity, including Ontario's Fair Hydro Plan which has reduced electricity bills for residential consumers by an average of 25 per cent and will hold any increases to the rate of inflation for four years. Targeted support to lower-income households comes through enhancements to the Ontario Electricity Support Program, and to on-reserve residential First Nations customers of licensed local distribution companies through the introduction of the First Nations Delivery Credit.

Ontario is committed to cultivating a dynamic and innovative business climate. A growing renewables and energy innovation sector is expected to be an important export industry for Ontario going forward. The Smart Grid Fund has established Ontario as an energy innovation leader, supporting 37 unique projects that are helping Ontario companies to grow, encouraging distribution sector modernization, and advancing the adoption of new technologies like electric vehicles and energy storage. The LTEP will maintain momentum in the energy innovation space by renewing and enhancing the Smart Grid Fund.

Ontario's Climate Change Action Plan focuses significant attention on using low-emission transportation to drive down greenhouse gas emissions in the province. As electric vehicles become more popular, pressures on local distribution networks will grow and utilities will need the tools to manage this change in a cost-effective way. The government will engage with its partners in the energy sector and vehicle manufacturers to develop a roadmap for vehicle-grid integration that will look closely at this technology and what it could mean for Ontario. It will also

work with its energy agencies to overcome market and regulatory barriers that inhibit the cost-effective integration of electric mobility.

Following the 2015 United Nations Climate Change Conference in Paris (COP21), other jurisdictions will be accelerating their efforts to procure clean energy technologies and will seek to attract manufacturing and promote research and innovation. Ontario firms could look to export their products and expertise to other jurisdictions. Ontario intends to fund international demonstration projects to help Ontario's innovative energy companies diversify to foreign markets.

Opportunities for Consultation

How does the Ministry of Energy provide an open and consultative process (including, but not limited to, posting on the Environmental Registry), including involvement of Aboriginal communities and organizations?

Developing the LTEP is a highly collaborative process. The Ministry works closely with its agencies and stakeholders during LTEP consultations and development.

Public consultation on the proposal for this decision was provided for 64 Days, from October 13, 2016 to December 16, 2016.

As a result of public consultation on the proposal, the Ministry received a total of 1755 comments: 200 comments were received in writing and 1555 were received online. Additionally, the Ministry hosted in-person sessions and also received 2,835 submissions and 41 private messages through an online comments tool and survey.

The consultation and engagement process, which took place from October 2016 to January 2017, included:

- 17 stakeholder sessions, with participation from over 500 stakeholders
- 17 public open houses attended by hundreds of Ontarians
- 17 meetings with representatives from nearly 100 Indigenous communities and organizations.

The Ministry promoted the Environmental Registry posting at all of these meetings.

The engagement process was supported by two technical reports on Ontario's electricity and fuels systems, a discussion guide *Planning Ontario's Energy Future: A Discussion Guide to Start the Conversation*, and an Indigenous workbook.

The Ministry reported back by releasing summaries of LTEP feedback to the public and to First Nations in the spring of 2017. A summary report was emailed to all First Nations session invitees and participants, and the Ministry hosted an LTEP First Nations wrap-up event on May 17, 2017. On June 23, 2017, the Ministry published an interactive map summarizing the topics raised during the engagement sessions.

Further, individual initiatives within the LTEP are expected to have separate engagement elements. For example, the LTEP implementation directives to the Independent Electricity System Operator and the Ontario Energy Board, require the two agencies to outline their engagement strategies in their respective implementation plans which are due to the Minister of Energy by January 31, 2018.

Date: January 3, 2017