

KEY MESSAGES

LTEP

- The Ministry of Energy is currently developing Ontario's next Long-Term Energy Plan (LTEP).
- The Ministry of Energy undertook an extensive engagement process between October 2016 and January 2017 to inform the development of the 2017 LTEP. The engagement process included:
 - Stakeholder sessions and public open houses in 17 communities
 - Additional 17 engagement sessions with Indigenous communities and organizations across the province.
 - Opportunity for public and stakeholders to provide written feedback through the online Environmental Registry. The Ministry received over 1500 written submissions.
- 2017 LTEP will consider other government commitments, including the Climate Change Action Plan (CCAP) and the Climate Change Mitigation and Low-Carbon Economy Act, 2016. The 2017 LTEP will take a more integrated approach to considering the electricity and fuel sectors compared to previous LTEPs.
- The feedback received from First Nation and Métis individuals, communities and organizations is critical to informing the policies and programs that will support the continued involvement of First Nations and Métis in the energy sector.

Green Ontario Fund

- Launched August 30, 2017, the Green Ontario Fund is a one-stop shop that will help people across Ontario save money and fight climate change by taking advantage of Ontario's programs and rebates to help homes and businesses reduce energy costs and reduce greenhouse gas emissions.
- The agency is tasked with reducing greenhouse gas emissions from energy use in buildings to help meet Ontario's emission reduction targets – targets that will require a transformation in the low-carbon technology market for buildings.

- **To achieve market transformation, the agency will work to reduce barriers to deploying and financing low-carbon technologies while working to meet the needs of low-income and marginalized communities.**
- **The new agency will complement Ontario's suite of existing conservation and energy efficiency programs, offering consumers greater choice and convenient access to all programs.**

QUESTIONS AND ANSWERS

LTEP

Q. How will the 2017 LTEP process differ from the process for the 2013 LTEP? When will the 2017 LTEP be released?

The province's long-term energy planning process was enshrined in legislation through recent changes to the Electricity Act, 1998. The Ministry of Energy is following this process as it develops the 2017 LTEP.

The first step in the legislated LTEP process was the release of an electricity sector technical report by the Independent Electricity System Operator (IESO). The Ministry of Energy also released a technical report on the fuels sector, prepared by Navigant Consulting. The two reports outlined different energy demand outlooks and associated impacts on supply, costs and emissions. The reports were released publicly to support the LTEP engagement process.

The 2017 LTEP will consider other government commitments, including the Climate Change Action Plan (CCAP) and the *Climate Change Mitigation and Low-Carbon Economy Act, 2016*. The LTEP and CCAP are both iterative processes. Each plan will inform the other.

The Ministry intends for the 2017 LTEP to take a more integrated approach to considering the electricity and fuel sectors compared to previous LTEPs.

Another new feature of the legislated LTEP process is the use of implementation plans. Following release of the LTEP, the Minister will issue implementation directives, approved by Cabinet, to IESO and Ontario Energy Board (OEB). Both IESO and OEB will be required to submit implementation plans outlining the programs, policies and procurements they intend to take to meet the goals of the LTEP. These plans will be reviewed and approved by the Minister.

Q. What is the government doing to ensure that regional needs are considered in the province's Long-Term Energy Plan?

Regional planning is the link between provincial and local electricity planning. It overlaps with and supports bulk system planning and distribution level planning. Regional needs and interests identified through the regional planning process form the context within which the Ministry will set overarching and longer term objectives for electricity in the province.

While regional planning has been happening for some time, in 2013 the Ontario Energy Board (OEB) made amendments to the Transmission and Distribution System Codes and the former OPA's license to adopt a formalized process. The process ensures transmitters, distributors and the Independent Electricity System Operator (IESO) work together to identify solutions to regional electricity needs.

The formalized process is complemented by a joint former OPA/IESO report, *Engaging Local Communities in Ontario's Electricity Planning Continuum* that has been implemented by IESO.

The first cycle of planning is complete in all 21 electricity regions in Ontario. Integrated Regional Resource Plans (IRRPs) have been released for twelve sub-regions. Electricity needs in all regions will be reviewed by 2018, and again every 5 years or sooner, if needed.

Electric Vehicles

Q. What role will electrical utilities have in electric vehicle integration?

Utilities will have a critically important role in supporting EV integration, using modern technologies and other cost-effective measures to minimize grid impacts.

Early engagement with stakeholders is a key element of the policy and program development cycle, and Ontario remains committed to working collaboratively with those impacted by new initiatives.

Electric mobility depends on distribution grids to supply fuel for vehicles. While the 2016 Ontario Planning Outlook estimates that network impacts of electric mobility will be very small, it's a different story when we get closer to the edge of the grid, or to parts of the grid where there are system constraints.

There is a virtual ecosystem of EV initiatives being planned or already underway, and it's important to keep utilities involved in the design and deployment of these initiatives so distribution grid impacts are minimized. To that end, the Ministry of Energy is committed to working closely with other ministries to identify where it can support utility engagement, and at a minimum, ensure that they are aware of opportunities to share their views on EV initiatives.

Some ministries have already taken the initiative to proactively engage with utilities. Most recently, the Ministry of Transportation (MTO) has been engaging directly with the EDA about how best to engage utilities on the EV Charging Ontario (EVCO) program. As per your second recommendation, I expect that these discussions will result in productive outcomes for the next round of program funding.

The Ministry of Energy will endeavour to support these types of discussions where possible, and, as per your first recommendation, would like to continue a conversation with the EDA about how best to ensure utility participation.

Q. What is the Ministry doing to avoid EV clustering and ensure the grid is stable?

Technologies like electric vehicles, energy storage, and distribution generation are often viewed as smart grid technologies. However, as pointed out in *The Power to Connect*, these types of distributed energy resources (DERs) require an intelligent platform to get the most out of these technologies when integrated with traditional distribution assets. The Ministry of Energy has looked closely at this type of optimization by supporting several EV projects under the Smart Grid Fund, including two that focused specifically on utility charge control (UCC) of residential EV charging.

While Ontario has not experienced any challenges to date with residential EV clustering, we are aware of this issue arising in other jurisdictions, and it's only a matter of time until it begins to happen here. When it comes to UCC, we are not talking about technology of the future – these types of hardware and software solutions are available today. The challenge is that there may be barriers that prevent utilities from investing in these technologies, even if these solutions are more cost-effective than traditional system investments.

The Ministry of Energy is looking at how it can create an environment for utilities to make sensible, cost-effective decisions that provide the most benefit to customers, including

investments behind the meter that can defer or avoid the need for system upgrades. As you note in your letter, smart chargers are a good example of technology that, when connected to intelligent UCC platforms, can provide a range of benefits both to the grid and to EV owners.

Customer choice will be a key feature of the LTEP, and the Ministry of Energy would like to learn more about the types of services that utilities can provide to customers with EVs.

Q. What role will LDCs have in meeting CCAP EV deliverables?

The Ministry of Energy is working together with the MTO, the Ministry of Environment and Climate Change (MOECC), and several other ministries involved in EV initiatives to build our collective knowledge on electric mobility, and look at how we can share that information with utilities and other stakeholders to support better planning and decision making.

Innovation in Ontario's Energy Sector

Q. How is the Ministry promoting and employing the use of innovation in Ontario's Energy Sector.

Innovation was a major theme of our LTEP consultations. The Ministry received a lot of constructive feedback on how to encourage innovation to build a stronger electricity sector that will benefit all Ontarians. This support extends throughout our grid, from behind-the-meter to the bulk system.

Ontario's grid – like many others across the world – is undergoing a transition. We are shifting away from a one-way flow from centralized generation to a two-way flow of electrons within a clean, decentralized and intelligent system. The declining costs of distributed energy resources, a more active customer, and our commitment to a clean energy future through the Climate Change Action Plan are also driving change in the electricity system.

Added to this, technological innovation and customer demands will continue to drive this transition forward. Ontario's energy sector must continue to build on its culture of innovation to ensure we keep pace with this rapidly transforming space. We see grid modernization as the platform for enabling efficient utilities, new business models, and customer choice.

The Ministry supports a number of initiatives to promote innovation and encourage customer participation and choice, and will continue to do so through the LTEP.

Bill Redesign

Q. What is the status of the Ministry's Bill redesign initiative, how is it working LDC's to ensure their concerns are addressed?

The Ministry recently introduced new invoicing requirements to support transparency and communication of the changes made under Ontario's Fair Hydro Plan (OFHP).

As of July 1, 2017, invoices are required to display standardized on-bill OFHP messaging, as well as include quarterly bill inserts to inform customers about OFHP initiatives.

The Ministry has also removed outdated messaging requirements from invoices (e.g., 8% rebate, DRC exemption) in order to free-up space and avoid confusion.

Despite these recent changes, there is an opportunity to further revise the regulatory framework on invoicing to improve the value of electricity bills to all consumers; ensuring they get the most out of their bills.

In pursuit of this effort, the Ministry plans to launch a Redesign Action Plan (RAP) aimed at improving the appearance and comprehension of electricity invoices. LDC's are playing an important role in the redesign process, any input they provide will play a vital role in the outcome of the project.

Green Ontario Fund

Q. What is the Green Ontario Fund?

Launched on August 30, 2017, the Green Ontario Fund is a non-profit provincial agency funded through proceeds from Ontario's carbon market.

The agency provides a one-stop website (GreenON.ca) for programs and rebates to help homeowners and businesses cut back energy costs and fight climate change.

The agency is working to reduce barriers to deploying and financing low-carbon technologies while working to meet the needs of low-income and marginalized individuals and communities.

Green Ontario Fund launched early registration its first new program, GreenON Installations, on August 30. GreenON Installations program offers a new no-charge installation service that provides homeowners with a complimentary smart thermostat and home energy review that will suggest other personalized energy-saving measures and incentives.

Details on additional new programs will be announced in the coming months.

Q. What is IESO's relationship with the Green Ontario Fund?

An August 4 direction from the Minister of Energy to the Independent Electricity System Operator (IESO) provides general authority for the IESO to work with the Ministry of the Environment and Climate Change and the Green Ontario Fund to help develop, design and deliver a range of potential Green Ontario Fund program types focused on reducing greenhouse gas emissions from Ontario residents and businesses.

The IESO (former Ontario Power Authority) has been delivering conservation programs in the province since 2005. Leveraging IESO expertise and resources in Green Ontario Fund program delivery is promoting efficiencies and a coordinated, one-window approach for customers.

Q. Why does Ontario need a government agency to do this job?

Without a single coordinating agency, it can be difficult for consumers to find information about existing and new programs to help them reduce their energy use and greenhouse gas emissions.

The Green Ontario Fund will ensure a more coordinated and efficient approach to deploying low-carbon technologies to Ontario households, businesses and industry. It will complement Ontario's suite of existing conservation and energy efficiency programs, offering consumers greater choice and convenient access to all programs.

Government support to help boost the deployment of low-carbon technologies will help improve the economies of scale and supply chain challenges facing the industry. Over time, the agency will also help ensure the availability of low-cost, long-term financing to help Ontarians undertake deep energy retrofits with little to no money down.

Conservation First Framework

Q. What is the Conservation First Framework? What benefit does it provide to utilities?

On January 1, 2015, Ontario launched the six-year Conservation First Framework to support province-wide and local electricity conservation programs.

The six-year Conservation First Framework is a long-term commitment to conservation.

It builds on the success of previous programs and supports the development of new programs to meet local needs and offer more choice for consumers. Local electricity utilities know their customers and are in the best position to deliver conservation programs. The Framework gives local electricity utilities more control over the conservation programs offered in their service area, and encourages coordination between electricity and natural gas conservation programs.

The Framework is expected to achieve 7 TWh of savings and assist the province in achieving its long-term conservation target of 30 TWh in 2032.