

Ministry of Energy

Office of the Minister

4th Floor, Hearst Block
900 Bay Street
Toronto ON M7A 2E1
Tel.: 416-327-6758
Fax: 416-327-6754

Ministère de l'Énergie

Bureau du ministre

4^e étage, édifice Hearst
900, rue Bay
Toronto ON M7A 2E1
Tél. : 416 327-6758
Téléc. : 416 327-6754



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Mr. Michael Rencheck
President and Chief Executive Officer
Bruce Power
PO Box 1540
Tiverton ON N0G 2T0

Dear Mr. Rencheck:

As you may be aware, Ontario recently completed a comprehensive review of its energy plans for the future. I am pleased to inform you of the release of Ontario's 2017 Long-Term Energy Plan (LTEP), *Delivering Fairness and Choice*.

The release of *Delivering Fairness and Choice* follows the most extensive set of consultations and engagements ever undertaken by the Ministry of Energy. This included consultations and engagements with stakeholders, municipalities, Indigenous communities and the general public. Hundreds came to the 17 open houses that were held across the province, and we engaged with representatives of over 100 different First Nation and Métis organizations and communities. The ministry also received over 1,500 submissions through the Environmental Registry, and over 2,500 submissions through the online Talks Tool, as well as other channels.

In written submissions and at meetings, we heard that affordability is a top priority and that Ontarians wanted more control and choice over how they use and pay for electricity. *Delivering Fairness and Choice* is committed to giving customers more choices in their energy use and will strive to make energy more affordable. Our plan ensures that Ontarians and their families continue to be at the centre of everything we do.

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Ontario's Energy Supply Mix

Since 2003, nearly \$70 billion has been invested in Ontario's electricity system. These investments have several benefits, including providing a clean, reliable electricity system. Combined with the shutdown of coal-fired generation, this has led to a significant transformation in our province's generation mix.

In 2016, non-emitting sources accounted for more than 90 per cent of all generation in Ontario, with emitting sources accounting for less than 10 per cent. This is a significant change compared to 2003, when power from emitting sources made up one-third of our generation mix.

The 2017 LTEP recognizes that fuels are an important component of the province's economy and Ontario is committed to decarbonizing the fuels sector. 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 government will continue to undertake modelling and analysis to identify opportunities to decarbonize the fuels sector consistent with the provincial target of reducing greenhouse gas (GHG) emissions by 37 per cent from 1990 levels in 2030.

While there is currently an adequate supply of electricity, a shortfall in capacity is expected beginning in the early-to-mid 2020s due to the shutdown of the Pickering nuclear generating station and refurbishment outages at the Darlington and Bruce nuclear generating stations. Ontario is moving forward with plans to refurbish ten nuclear units at Darlington and Bruce. The refurbishments will secure 9,800 megawatts of affordable, reliable and emission-free generation capacity over the long-term while creating billions of dollars in economic activity and thousands of jobs in communities across Ontario. Darlington Unit 2 refurbishment is off to a great start and is on track to be complete on time and on budget. Ontario will continue to exercise strict oversight of nuclear refurbishments and ensure they provide value for ratepayers.

The need for additional capacity will be met through actions under the Independent Electricity System Operator's Market Renewal initiative, which will redesign the province's electricity markets and is expected to save up to \$5.2 billion between 2021 and 2030. On the whole, we are moving away from relying on long-term electricity contracts and are enhancing the market-based approach to reduce electricity supply costs and increase flexibility.

Through the Canadian Energy Strategy (CES), Ontario is working with other provinces and territories to enhance the ways energy is produced, moved and used in Canada to maximize the social, environmental and economic benefits that flow from the energy sector. Ontario supports maintaining the CES as a central mechanism for provincial/territorial energy collaboration and as a means to continue to advance common energy priorities under the direction of Canada's Premiers.

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Energy Prices

Our success in building a clean and reliable electricity system means we can maintain our focus on helping Ontarians and their families. Over the last several years, electricity prices have increased too much, too quickly, and that's why we took strong and decisive action in launching Ontario's Fair Hydro Plan.

Ontario's Fair Hydro Plan reduces electricity bills for residential consumers by an average of 25 per cent and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from the reduction. Lower-income Ontarians and those living in eligible rural and Northern communities are receiving even greater reductions, as much as 40 to 50 per cent.

Thanks to Ontario's Fair Hydro Plan, as well as a number of other measures aimed at reducing costs, the 2017 LTEP residential price outlook remains below the 2013 LTEP's outlook for the forecast period.

Ontario's Commitment to Conservation and Energy Efficiency

Conservation and energy efficiency are a growing part of our everyday lives and they require a sustained commitment to achieve savings over the long term. Ontario will continue to provide a variety of conservation and demand management programs for homes and businesses, and will strengthen its commitment to conservation by:

- driving toward its long-term target of electricity savings target of 30 terawatt hours of electricity in 2032, which will help offset almost all forecast growth in electricity demand;
- regularly assessing the achievable potential for energy conservation, considering initiatives under Ontario's Climate Change Action Plan, and exploring how to further integrate conservation and new Green Ontario Fund programs;
- continuing to set advanced efficiency standards for products and appliances, and to explore setting or updating energy efficiency standards for key electrical equipment in drinking water and wastewater treatment plants;
- further enabling demand response resources to compete with other resources through the transition to a capacity auction;
- encouraging local distribution companies to pursue energy efficiency on their distribution systems, such as through measures that reduce line losses or optimize voltage, to achieve customer electricity and cost savings; and
- expanding Green Button provincewide, so consumers can share their energy data with apps and energy management tools of their choice, which can help them identify conservation and energy efficiency opportunities.

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Responding to Climate Change

Ontario is taking a leading role in the global fight against climate change. In 2014, Ontario eliminated coal-fired generation and now our electricity system is 90 per cent free of emissions that cause climate change. Thanks to our investments in cleaner generation, our electricity sector is forecast to only account for 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 clean and reliable electricity system gives the province a strong foundation on which to pursue increased electrification, including the use of more electric vehicles. We will:

- use proceeds from the province's cap and trade program to help Ontarians shift away from GHG emitting fuels that cause climate change and reduce their energy consumption;
- continue to work with industry partners to introduce renewable natural gas into the province's natural gas supply and expand the use of lower-carbon fuels for transportation; and,
- strengthen the ability of the energy industry to anticipate the effects of climate change and integrate its impacts into its operational and infrastructure planning.

The Climate Change Action Plan and cap and trade program form the backbone of Ontario's strategy to cut GHG emissions to 15 per cent below 1990 levels by 2020, 37 per cent by 2030, and 80 per cent by 2050. The cap and trade program – which came into effect on January 1, 2017 – is a flexible, market-based program that sets an annual cap for GHG emissions, with the targets becoming more stringent over time. The cap will be lowered each year to enable Ontario to meet its GHG reduction targets. Cap and trade proceeds are being invested in a transparent and accountable way back into projects that fight climate change.

Together, cap and trade and Market Renewal initiatives can help to ensure electricity sector emissions in Ontario remain well below historical levels, while also helping to meet our climate change and GHG reduction commitments.

Innovation in the Energy Sector

Digitization is changing the way that global industries do business. It's faster, more efficient, costs less, and can quickly be adapted to the needs of users and customers. The digital transformation in the electricity sector is already underway. Ontario was one of the first jurisdictions in the world to universally deploy smart meters, which are the basic foundation for a truly modern distribution system. We have taken important steps to build on this foundation through the Smart Grid Fund, which has supported 38 projects that are testing the full range of next-generation digital technologies.

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However, we're at a critical juncture in Ontario. It's clear that there are barriers getting in the way of grid modernization, and the LTEP is taking bold steps to overcome these barriers. The goal is to create the right environment for utilities to innovate and invest in smart technologies that will improve efficiency, lower costs and provide customers more choice.

This type of innovation will enable electricity sector participants and customers to make the best use of other game-changing technologies, like energy storage, distributed generation and electric mobility. The government will also take steps to remove barriers standing in the way of these particular technologies, paving the way for further innovation in the electricity sector.

To support these efforts, the Smart Grid Fund will also be renewed and enhanced. This program has helped set Ontario apart as an international innovation leader. By continuing to invest in energy innovation, we are creating skilled jobs and economic growth, while at the same time demonstrating and deploying intelligent solutions that will make our electricity system work better. The proposed International Energy Demonstration Fund has the potential to complement these efforts by helping local innovators to diversify to new markets internationally.

These disruptive technologies will impact the traditional electric utility business model, changing the ways in which utilities and energy regulators think about how to provide value to customers. The evolution of Ontario's utility sector will be supported by the work of the Ontario Energy Board, which will be enhancing its efforts to encourage greater productivity, efficiency, and accountability in regulated utilities. This includes by encouraging new partnerships between utilities to share services and explore new business opportunities.

Ontario is working with the Ontario Energy Board (OEB) to provide customers greater choice in their electricity price plans. Innovative Time-of-Use pilots are now underway in select LDC service areas, and results will help guide OEB decisions on potential new price plans that could give customers greater control, be better matched to their lifestyles and help improve system efficiency.

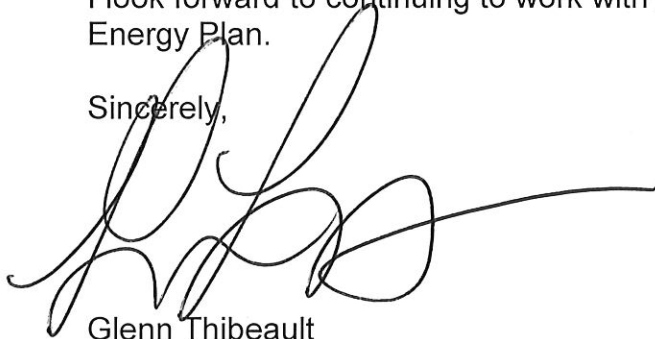
The net metering framework is being enhanced to give customers new ways to participate in renewable energy generation and to reduce their electricity bills. These enhancements include proposing legislative and regulatory amendments that would allow third-party providers to own and operate net-metered renewable generation systems. We are also supporting innovative renewable distributed generation demonstration projects, including virtual net metering, to help us better understand how clean generation can be integrated intelligently to solve current and future grid issues.

I hope you enjoy reading *Delivering Fairness and Choice*. This plan represents Ontario's commitment to keeping electricity rates affordable while maintaining a safe, clean, modern and reliable electricity system that will benefit all Ontarians.

To view a complete copy of *Delivering Fairness and Choice*, please visit www.ontario.ca/energyplan.

I look forward to continuing to work with you to implement Ontario's new Long-Term Energy Plan.

Sincerely,

A handwritten signature in black ink, appearing to be 'Glenn Thibeault', written over the word 'Sincerely,'.

Glenn Thibeault
Minister