

Introduction – The Environmental Commissioner of Ontario (ECO), Dianne Saxe, is an officer of our Legislative Assembly which means she doesn't work for the government, or the governing party, but for the provincial parliament. The ECO is a self-described "tough but fair watchdog over Ontario's environmental, energy and climate performance."¹ In April 2018, ECO Saxe released a report, *Making Connections: Straight Talk About Electricity in Ontario*, which is an authoritative source of information about Ontario's electricity prices and the basis for this CCL Canada briefing note.²

Didn't closing the coal-fired generators fix things? – Ontario has reduced the use of fossil fuels in its electricity system from 74% low-carbon generation in 2005 to 96% low-carbon generation in 2017. As a result, Ontario has a more expensive but a more reliable, cleaner electricity system which now provides roughly 20% of Ontario's energy. The other 80% of the province's energy is derived from fossil fuels, namely natural gas and petroleum products used for heating, transportation and industry.³

Why has the cost of electricity gone up? – Ontario's cleaner, more reliable electricity system costs about \$21 billion each year, up from about \$15 billion in 2006. Almost all of this increase is due to higher generation costs (not conservation, transmission or distribution), and this new generation was needed to improve reliability and to replace coal plants. Though the unit cost of electricity (including both system and other costs) increased 45% from 2006 to 2016, Ontario home electricity bills increased by only 19% despite a drop in average household electricity use. As of 2017, primarily due to Ontario's Fair Hydro Plan, average Ontario home electricity bills were 13% lower than they were in 2006.⁴

Will our electricity bills continue to rise? – Today's electricity customers pay only 80% of the cost of the electricity system through their electricity bills. The other 20% has been shifted to taxpayers and to future ratepayers, who will also pay \$21 billion in interest on money the province has borrowed under the Fair Hydro Plan. Electricity rates will go up again after 2021 as we begin to repay the borrowed money.⁵

Why is our electricity so expensive? – Many consumers do not pay "average" bills as they may have different distribution rates. Some Ontario households also rely on electric resistance heating, and some of those homes are in colder parts of the province. Also, the demand for electricity swings from high to low at different times of day. Peak electricity use on the hottest days and coldest evenings can be more than double off-peak electricity use. Meeting peak demand, which usually occurs for only a few hours each year, has an outsized impact on Ontario electricity costs."⁶

¹ <https://eco.on.ca/about-us/commissioner/>

² <https://eco.on.ca/reports/2018-making-connections/>

³ *Making Connections*, pages 6-7.

⁴ *Ibid*, pages 10, 113, and 126.

⁵ *Ibid*, page 11.

⁶ *Ibid*, pages 7, 67 and 114.

Isn't the goal just to keep electricity prices down? – To judge the value Ontarians receive for different generating resources, it is not sufficient to compare the direct, short-term financial cost of each resource. Each type of electricity generation provides its own advantages and disadvantages to society and to the grid, including environmental impacts, greenhouse gas emissions and air pollution and human health impacts.⁷

So what's the plan to deal with greenhouse gas emissions? – The next steps to reduce our greenhouse gas emissions are to convert the fossil fuels that provide 80% of our energy to low-carbon electricity. The provincial limits on greenhouse gas pollution in the *Climate Change Mitigation and Low-carbon Economy Act* mean that more than 40% of the fossil fuels now used for heating and transportation must be replaced by conservation, active transportation, biofuels, direct renewable energy and low-carbon electricity over the next 13 years. The Ontario government is not prepared for this transformation. The 2017 *Long-Term Energy Plan* does not fulfill the Ministry of Energy's legal obligation to plan Ontario's energy system, which includes planning for all fuels, not just electricity.⁸

Can't we just reduce GHG emissions and keep prices down? – Ontario has made a heavy commitment to nuclear while largely abandoning renewables.⁹ Yet, if low-carbon electricity alternatives become cheaper than nuclear during the next 50 years, Ontario may not be able to take full advantage, due to sunk costs and economies of scale.¹⁰ It's also worth noting that raising prices, selectively, would encourage peak demand to shift to when there is surplus power. This way, instead of building and operating electricity supply to follow demand, we could adjust demand for electricity to match the available supply. Ontario should also support customer interest in generating their own renewable electricity, at a low overall cost, by paying "time-of-use" rates and by allowing virtual net metering for group or community projects.¹¹

Conclusion – Today's electricity prices are a hot button election issue for many Ontarians, especially as there are more rate increases ahead. Price signals can spur renewable electricity innovation, and the widespread adoption that will eventually bring costs down. And *temporarily* higher prices may actually pave the way for a quicker transition by providing larger incentives for immediate action. But we need to avoid creating obstacles to change, including over-committing to nuclear infrastructure. A carbon fee and dividend policy can help accelerate the transition to a low-carbon future: by raising high-carbon energy prices via the fee; thereby providing Ontarians with a reason to both generate and consume low-carbon electricity; while returning purchasing power to consumers via the dividend. High electricity prices in Ontario may seem to be a problem, but they could be part of the climate change solution too.

⁷ Ibid, page 139.

⁸ Ibid, pages 7, 12 and 242.

⁹ Ibid, page 9.

¹⁰ According to the Financial Accountability Office of Ontario's *Nuclear Refurbishment: An Assessment of the Fiscal Impact of the Provinces Fair Hydro Plan* released in Fall 2017, as cited in *Making Connections* (page 218).

¹¹ *Making Connections*, pages 12, 250 and 284.