

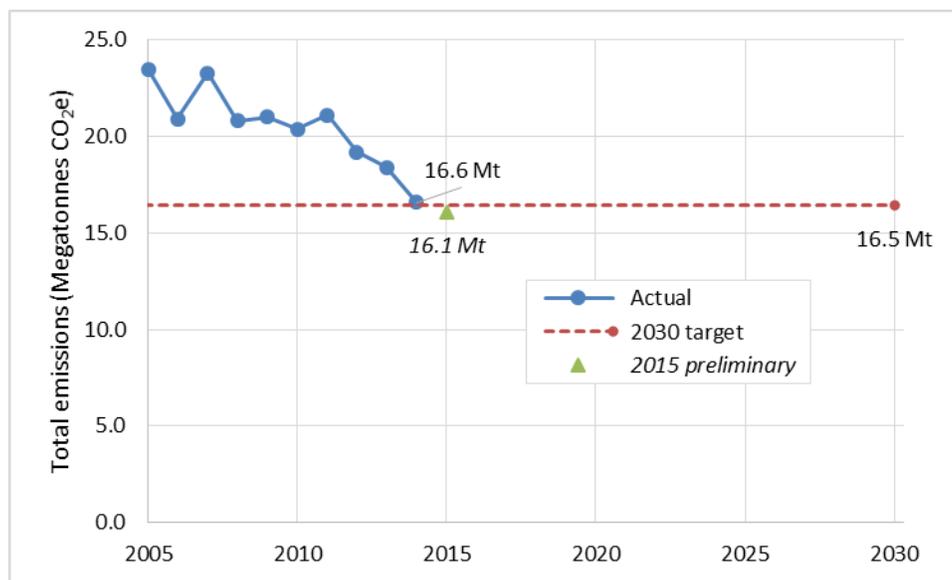
# Canada's 2030 emissions reduction target, carbon taxes, and Nova Scotia

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One of Prime Minister Trudeau's many commitments at the COP21 climate conference held in Paris in December 2015 was to meet Canada's Intended Nationally Determined Contributions (INDC) emissions reduction target. The target, originally specified by the Harper government in May 2015, states that Canada plans to reduce its greenhouse gas emissions by 30% from 2005 levels by 2030.

Despite the prime minister's commitment, it is broadly accepted that Canada will not meet its 2030 INDC target. However, what may come as a surprise to many Canadians is that in 2014, Nova Scotia's emissions were 29.4% below those in 2005, just shy of INDC target.

In 2005, Nova Scotia's emissions were 23.5 megatonnes (Mt), while a decade later in 2014, they had declined by almost seven megatonnes to 16.6 Mt, just shy of a 30% reduction of 16.5 Mt. In fact, preliminary data for 2015 suggests that Nova Scotia's emissions will have surpassed the 30% mark with estimated emissions of 16.1 Mt. The following figure shows Nova Scotia's actual (2005-2014) and preliminary emissions for 2015 and the 2030 target.



## Nova Scotia's actual and preliminary emissions and the 2030 INDC target

About half of Nova Scotia's seven megatonne reduction can be attributed to a decline in emissions from the province's electricity supplier, Nova Scotia Power, specifically:

- A legislated emissions cap, part of the province's Climate Change Action Plan, requiring Nova Scotia Power to reduce its emissions from 10 Mt in 2010 to 7.5 Mt in 2020. By 2015, Nova Scotia Power had already met its 2020 target with emissions of 6.77 Mt by using less coal and a combination of natural gas and renewables.

In early 2015, the Canada-Nova Scotia Equivalency Agreement was signed, allowing Nova Scotia Power to continue operating its ageing fleet of coal-fired thermal generating stations to meet Nova Scotia's demand for electricity. In exchange, NSP is required to meet a 2030 cap of 4.5 Mt. This means that by 2030, the company's *total* emissions of 4.5 megatonnes will be considered equivalent to the federal *per-facility* limit of 420 tonnes per gigawatt-hour.

- Nova Scotia also passed climate-change legislation specifying annual renewable-electricity targets for Nova Scotia Power, increasing from 9% in 2010 to 25% in 2015, annual production must remain above 25% from 2015 until 2019, and finally, increasing to 40% in 2020. In 2015, 26.6% of Nova Scotia Power's electricity came from renewable sources, mostly wind.
- Emissions also declined because the demand for electricity between 2005 and 2014 in the province fell by over 10% because two of the province's paper mills closed and the manufacturing sector is experiencing an ongoing slowdown.

The other half of Nova Scotia's seven megatonne reduction during this period was the result of a 23% decline in energy demand for most types of transportation, the closure of the province's oil refinery, and changes to the ways buildings are heated (for example, from fuel oil to natural gas or electricity).

The total reductions achieved are undoubtedly impressive. For example, per-capita emissions in Nova Scotia have fallen from 25 tonnes/person in 2005 to 17.6 tonnes/person in 2014. However, this has come at a price.

Electricity consumers have been subject to a Demand Side Management tax to offset the cost of home-energy retrofits for low-income Nova Scotians and reduce the price of energy-efficient appliances. This, coupled with the costs of Nova Scotia Power switching from coal to natural gas and the institution of a feed-in tariff for renewables, has since 2005, contributed to a 62% rise in the cost of electricity for residential consumers.

Nova Scotians face the prospect of further electricity price rises as Nova Scotia Power uses more natural gas and connects to Muskrat Falls in Labrador in 2020, part of the plan to meet 40% of its electricity from renewable sources.

The increasing cost of electricity and other energy sources and the effects of the economic downturn in the first decade of this century have all contributed to the decline in Nova Scotia's emissions as well as impacting Nova Scotia's economy. The province's GDP grew 7.6% between 2005 and 2014 – the second lowest in the country (only New Brunswick was lower at 3.6%) and less than half the national average.

Compounding this problem is the fall in oil price. Albertan oil companies are laying off workers, including many from Nova Scotia who are no longer able to send remittances to their families in Nova Scotia. Moreover, the state of Nova Scotia's economy means that workers returning to Nova Scotia are having increasing difficulty in finding employment.

While there has undoubtedly been a small rise in the number of workers in “green” industries, their numbers have fallen far short of what had been projected and have failed to offset the increase in the province’s unemployment rate.

Despite Nova Scotia’s success in meeting Canada’s 2030 reduction target, the Federal Minister of Environment and Climate Change, Catherine McKenna, has made no commitment to maintaining the Equivalency Agreement, considers the Harper 30% reduction a “fake target” (despite Prime Minister Trudeau committing to it), favours “effective measures to reduce emissions” rather than targets, and plans to set a national price on carbon.

Before imposing a national carbon-price on Nova Scotians, the federal minister should recognize that the Equivalency Agreement is a success, Nova Scotia has reduced its emissions substantially since 2005, and although the province does not have an official price on carbon, the rising cost of electricity and the stagnant economy are proving to be effective proxies.

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