



Annual Planning Outlook

Carbon Pricing

December 2022



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The electricity sectors in Ontario and in neighbouring jurisdictions are subject to carbon pricing. This section details the carbon pricing policy currently in effect in Ontario, along with an overview of carbon pricing policies of our neighbouring jurisdictions. Ontario imports from and exports to its five neighbours every day of the year. To forecast the impact of imports and exports, the IESO models the demand and supply in Ontario and in neighbouring jurisdictions, and develops regional commodity and carbon price forecasts for fuels used to produce electricity.

The Ontario-specific carbon pricing assumptions used in this outlook are based on the provincial Emissions Performance Standards (EPS) program, which was accepted by the federal government on September 20, 2020. Instead of carbon pricing being applied to the input fuel, for natural gas fired electricity generation in Ontario, the carbon pricing is applied only to a portion of the carbon released while producing electricity. Electricity production is considered an emission-intensive, trade-exposed (EITE) industry. To minimize exposure to trade in areas with different carbon pricing, a benchmark emissions rate is applied. Carbon pricing is applied only to emissions released above the industry-specific benchmark emissions rate.

For natural gas, this benchmark is set at 370 tCO₂e/GWh for the entire APO planning period. To put this in context, the average combined-cycle gas turbine in Ontario has an emission factor of approximately 415 tCO₂e/GWh. As such, the carbon pricing applied with the EPS, on average, is only applied to 45 tCO₂e/GWh (the amount above 370), or approximately 10% of actual emissions associated with electricity production. In Summer 2022, the Ontario government published proposed amendments to the EPS that would see the benchmark decrease to 310 tCO₂e/GWh, however, this has not yet been passed into law.¹

In this APO, the carbon price was increased to align with the federal government's announcement that it intends to increase the carbon price up to \$170/t CO₂e by 2030, and remain at this level for the duration of the planning period. There have not been any changes made to the benchmark or carbon price trajectory since the 2021 APO, which means that the carbon price forecast is essentially the same as last years, adjusted for inflation.

In order to more accurately forecast the impact of carbon prices on trade, the IESO has modelled the carbon pricing policies applied in neighbouring jurisdictions where there is a material impact on electricity sector emissions.² These include Nova Scotia,³ New Brunswick,⁴ and parts of the United States through the Regional Greenhouse Gas Initiative.⁵

¹ <https://prod-environmental-registry.s3.amazonaws.com/2022-08/Proposed%20Regulatory%20Amendments%20for%20EPS%20Program%202023-2030.pdf>

² Although carbon pricing is in effect in Manitoba and Quebec, these jurisdictions are considered essentially non-emitting.

³ Nova Scotia's cap-and-trade program took effect January 1, 2019. More information is available at [Nova Scotia's Cap-and-Trade Program](#).

⁴ The federal output-based pricing system was in effect in New Brunswick as of January 1, 2019. For more information, see the [Regulations Amending Part 1 of Schedule and Schedule 2 to the Greenhouse Gas Pollution Pricing Act](#).

⁵ For more information, see the [Regional Greenhouse Gas Initiative](#), currently in effect in 10 northeastern states.

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