

Annual Planning Outlook

Carbon Pricing

March 2024





1. Carbon Pricing

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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 310 tCO₂e/GWh for the entire APO planning period. This is in alignment with the provincial government's amendments to the EPS released in the summer of 2022, and which went into law January 1, 2023. To put this in context, Ontario's natural gas fleet has an average emissions factor of approximately 390 tCO₂e/GWh. As such, the carbon pricing applied by the EPS, on average, is only applied to 80 tCO₂e/GWh (the amount above 310 tCO₂e/GWh), or approximately 20% of actual emissions associated with electricity production.

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 $170/t CO_2$ by 2030, and remain at this level for the duration of the planning period.

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.¹ These include Nova Scotia,² New Brunswick,³ and parts of the United States through the Regional Greenhouse Gas Initiative.⁴

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¹ Although carbon pricing is in effect in Manitoba and Quebec, these jurisdictions are considered essentially non-emitting.

 ² Nova Scotia's cap-and-trade program took effect January 1, 2019. More information is available at <u>Nova Scotia's Cap-and-Trade Program</u>.
³ The federal output-based pricing system was in effect in New Brunswick as of January 1, 2019. For more information, see the <u>Regulations</u> Amending Part 1 of Schedule and Schedule 2 to the Greenhouse Gas Pollution Pricing Act.

⁴ For more information, see the <u>Regional Greenhouse Gas Initiative</u>, currently in effect in 10 northeastern states.

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