

Updated December 2023

## CANADA'S OBPS AT A GLANCE

Years in operation	Began in 2019, with annual compliance periods.
Overall cap & trajectory	<p>The OBPS applies to facilities that emit over 50,000 tCO<sub>2</sub>e/year. Facilities that emit over 10,000 tCO<sub>2</sub>e in regulated sectors can opt-in to the OBPS at any time.</p> <p>Emission reduction obligations are determined using an output-based standard (OBS), which varies based on the industrial activity and the competitiveness of the sector.</p> <p>The OBPS is currently implemented in PEI, Manitoba, Yukon, and Nunavut. Ontario and New Brunswick were previously covered under the OBPS and have subsequently transitioned to their respective provincial programmes, retroactively as of 1 January 2021, for New Brunswick and on 1 January 2022, for Ontario. As of January 1, 2023, Saskatchewan's electricity and natural gas transmission sectors that were previously regulated under the federal OBPS transitioned to its provincial OBPS program.</p>
Target(s)	<p>40-45% below 2005 levels by 2030, to reach 443 million tCO<sub>2</sub>e. Canada's emissions in 2021 were 670 Mt. Canada also intends to reach net-zero emissions by 2050 and set legally binding five-year emission reduction targets.</p>
Emissions reduced to date	No data is available yet
Sectors covered	<p>Sectors covered under the OBPS include:</p> <ul style="list-style-type: none"> <li>• Oil and gas production</li> <li>• Mineral processing</li> <li>• Chemicals</li> <li>• Pharmaceuticals</li> <li>• Iron and steel</li> <li>• Mining and ore processing</li> <li>• Lime and nitrogen fertilizers</li> <li>• Food processing</li> <li>• Pulp and paper</li> <li>• Automotive</li> <li>• Electricity generation</li> <li>• Cement</li> </ul>
GHGs covered	<ul style="list-style-type: none"> <li>• CO<sub>2</sub></li> <li>• CH<sub>4</sub></li> <li>• N<sub>2</sub>O</li> <li>• SF<sub>6</sub></li> <li>• PFCs</li> <li>• HFCs</li> </ul> <p>The OBPS covers 27% of GHG emissions where the backstop applies.</p>
# of covered entities	53 regulated facilities in 2022



Allocation method	<p>OBS is set by industrial activity and is based on the sector's average emissions intensity. OBS for sectors with low or medium competitiveness risk is set at 80% of the sector's average emissions intensity, while OBS for sectors with high risk is set at 90% or 95%.</p> <p>proposed amendments place a 2% annual reduction on most OBSs and a 1% rate on very high-risk EITE sectors, including lime manufacturing, cement manufacturing, petrochemical manufacturing (except ethylene glycol), and natural gas extraction and processing.</p>
Trading rules	<p>A facility may comply through any combination of payment of the excess emissions charge; use of surplus credits; use of recognised units (approved provincial offset credits); and use of offset credits.</p> <ul style="list-style-type: none"> <li>• Surplus credits have a five-year expiry limit.</li> <li>• Offset credits have an eight-year expiry limit.</li> <li>• Surrendered compliance units are retired by ECCC.</li> <li>• A facility may choose to voluntarily retire its compliance units.</li> </ul>
Use of offsets and linking	<p>Entities can use offset credits from the Federal GHG Offset System and recognised units from approved provincial offset systems (Alberta and British Columbia, since March 2021). The 2019-21 compliance periods did not have compliance unit usage limits, while from 2022 onwards there is a 75% usage limit.</p>
Other features	N/A
Penalties for non-compliance	<p>If the 15 December compliance deadline is missed, compliance is due at an increased rate of four to one (4:1) by 15 February of the following year. Facilities are required to submit four compliance units for each tCO<sub>2</sub>e over the emissions limit or four times the excess emissions charge rate.</p>
Use of revenues	<p>All proceeds collected from OBPS compliance payments will be returned directly to regulated emitters to support GHG emission reduction projects and the use of lower-carbon technologies and processes. Proceeds are being returned to the provinces of origin through a merit-based funding stream called Output-Based Pricing System Proceeds Fund including the Decarbonization Incentive Program (DIP) and Future Electricity Fund (FEF). FEF is funded through OBPS-covered electricity generating facilities (utilities) and proceeds from FEF will be returned through funding agreements with federal backstop provinces, as such, they are not open to other emitters.</p>

## Major Developments

Manitoba, PEI, Nunavut, and Yukon are the remaining covered jurisdictions under the federal OBPS as of January 1, 2023, after New Brunswick and Ontario transitioned from the federal system at the end of 2020 and 2021 respectively. Additionally, Saskatchewan's two sectors covered under the federal OBPS were

integrated into the amended provincial OBPS as of January 1, 2023. This allows Saskatchewan to regain the authority to regulate these sectors. ECCC formally removed Saskatchewan as listed province under the Federal OBPS through the Order Amending Part 2 of Schedule 1 to the



Greenhouse Gas Pollution Pricing Act (July 5, 2023).

The federal fuel charge expanded to Newfoundland and Labrador, Nova Scotia, and Prince Edward Island beginning July 1, 2023 and will continue to apply in Alberta, Saskatchewan, Manitoba, Nunavut, Ontario, and Yukon.

The Regulations Amending the Output-Based Pricing System Regulations and the Environmental Violations Administrative Monetary Penalties Regulations were published in draft regulation (Canada Gazette, Part I) in October 2022 to come into force in 2023. The amending regulations aim to increase the stringency of the federal OBPS program for the 2023-2030 period to meet the requirements of the federal carbon pollution pricing benchmark (the 'federal benchmark').

The final amending regulations were published on November 22, 2023, in the Canada Gazette, Part II. Some modifications apply retroactively from January 1, 2023, based on section 194 of the GGPPA and the October 2022 Notice of Intent. Other administrative changes will take effect either upon registration or on January 1, 2024, applicable beginning for the 2024 compliance period.

The amendments place a 2% annual reduction on most OBSs and a 1% rate on very high-risk EITE sectors, including lime manufacturing,

cement manufacturing, petrochemical manufacturing (except ethylene glycol), and natural gas extraction and processing. ECCC maintained this tightening rate despite stakeholder feedback challenging the rates and highlighting the funding programs and tax incentives that can assist EITE sectors to decarbonize.

The tightening rates will not apply to the generation of electricity using fossil fuels under the OBPS. The ECCC intends to align the OBS for the sector with the Clean Electricity Regulations (CER) program. The CER proposes that electricity generators using fossil fuels and with a capacity of 25 MW or more would not be permitted to produce GHG emissions of more than 30 tCO<sub>2</sub>/GWh of electricity generated. This limit would come into effect on 1 January 2035, giving electricity generators over a decade to prepare. Previously, ECCC proposed compliance options for facilities emitting above the emissions intensity, but the draft regulations do not include the compliance pathways initially proposed.

Additionally, the amendments add 12 industrial activities to the existing activities and prescribe their OBSs. These additional OBSs have been developed for activities where three or more facilities in Canada have emissions of 10 kt of CO<sub>2</sub>e or more per year per facility.

Sector	Activity	Units Measurement	of OBS (tCO <sub>2</sub> e/unit)
Oil and gas production	Surface mining of oil sands and extraction of bitumen	barrels of bitumen	0.0266
Chemicals	Production of ethylene glycol with six or fewer monomer units	tonnes of ethylene glycol with six or fewer monomer units	0.326
Mining and ore processing	Production of evaporated salt through solution mining	tonnes of evaporated salt at a concentration of at least 99% of NaCl	0.153
Food processing	Production of malt	Tonnes of malt	0.117
Wood products	Production of wood veneer or plywood	Cubic metres of wood veneer and plywood	0.0701
	Production of lumber	Cubic metres of lumber	0.0229
	Production of particle board and low, medium or high-density composite panels, including hardboard	Cubic metres of particle board and of panels composed primarily of cellulosic fibers and a bonding	0.0889





		system cured under heat and pressure, including hardboard	
Aluminium	Aluminium production from alumina	Tonnes of liquid aluminium	1.58
	Production of baked anodes for use in aluminium production from alumina	Tonnes of baked anodes	0.328
	Production of calcined petroleum coke for use in aluminium production from alumina	Tonnes of calcined petroleum coke	0.486
	Production of alumina from bauxite	Tonnes of alumina (Al <sub>2</sub> O <sub>3</sub> ) equivalent	Calculated in accordance with section 37 of the Regulations
Rubber products	Production of pneumatic tires	Tonnes of pneumatic tires	0.225

Alongside these new OBSs, ECCC posted a new List of recognized additional industrial activities under the OBPS, and updated policies for voluntary participation and for the process of advocating for a sector assessment. These documents provide additional information and guidance on the steps required to request for the inclusion of sectors under the program and the process for opting-in when the sector is approved.

Additionally, the detailed emissions quantification methods, previously in Schedule 3 to the OBPS Regulations, were incorporated into Quantification Methods for the OBPS Regulations, a referenced technical document published on December 12, 2023. This separates the quantification methodology to a document living outside of and referenced in the regulations, which will ease the regulatory process to update methodology on an ongoing basis.

### ***Canada's GHG Offset System***

On June 8, 2022, ECCC published the final regulations for Canada's Greenhouse Gas Offset Credit System. Credits generated under this federal offset system provide a compliance alternative for facilities under the federal OBPS in place of paying the Excess Emissions Charge.

In February 2023, ECCC published the Landfill Methane Recovery and Destruction, Version 1.1 protocol which is applicable across Canada (except B.C. Alberta, and Quebec) and the Reducing Greenhouse Gas Emissions from Refrigeration Systems, Version 1.0 protocol, applicable Canada-wide. Project

developers can now submit application for project registration under the two published protocols. However, lead time to register projects and issue credits is typically more than a year.

The protocol development process under Canada's GHG Offset System is ongoing with the Improved Forest Management on Private Land draft protocol published in July 2023. Further, in December 2023 ECCC published the draft Reducing Enteric Methane Emissions from Beef Cattle federal offset protocol, open for a 60-day public comment period. In the same announcement, an updated Reducing Greenhouse Gas Emissions from Refrigeration Systems, Version 1.1 protocol with select updates.

Additionally, ECCC is currently developing offset protocols for the following activities (1) livestock feed management, (2) direct air carbon dioxide capture and sequestration (3) enhanced soil organic carbon (4) avoidance of manure methane emissions through anaerobic digestion and other treatments with the support of technical expert groups. ECCC is planning to initiate the development of an improved forest management on public land protocol in fall 2023 and is considering a protocol for bioenergy carbon dioxide capture and sequestration for future development.

In addition to regulated facilities using offsets for compliance under the federal OBPS, ECCC has highlighted other potential sources of demand for federal offset credits through voluntary pathways. Other potential areas of demand may come from new policies that may



consider the use of offsets as eligible compliance units. This could include the proposed federal Oil & Gas Emissions Cap and the Net-Zero Challenge. Future amendments may also be developed in provincial carbon

pricing programs to allow for use of credits from the Federal GHG Offset System within their compliance pathways, but this pathway is reliant on political will and cooperation.

## Market Commentary

ClearBlue's current OBPS Supply and Demand Forecast can be seen in Figure 1. Ontario's exit from the federal OBPS resulted in an increase in market activity in 2022. Surplus Credits generated by Ontario facilities during the 2019-2021 compliance periods had to be monetized before the final December 15, 2022, deadline (final compliance period under the program) or they would lose their value. Surplus Credits generated in the federal OBPS are not fungible in the Ontario EPS or any other provincial carbon pricing system. Therefore, in 2022 all Ontario facilities sold their credits into the OBPS market, which provided an increased opportunity to purchase Surplus Credits than in previous compliance periods.

Additionally, a decrease in demand in 2022 is due to the 75% compliance unit usage limit in force.

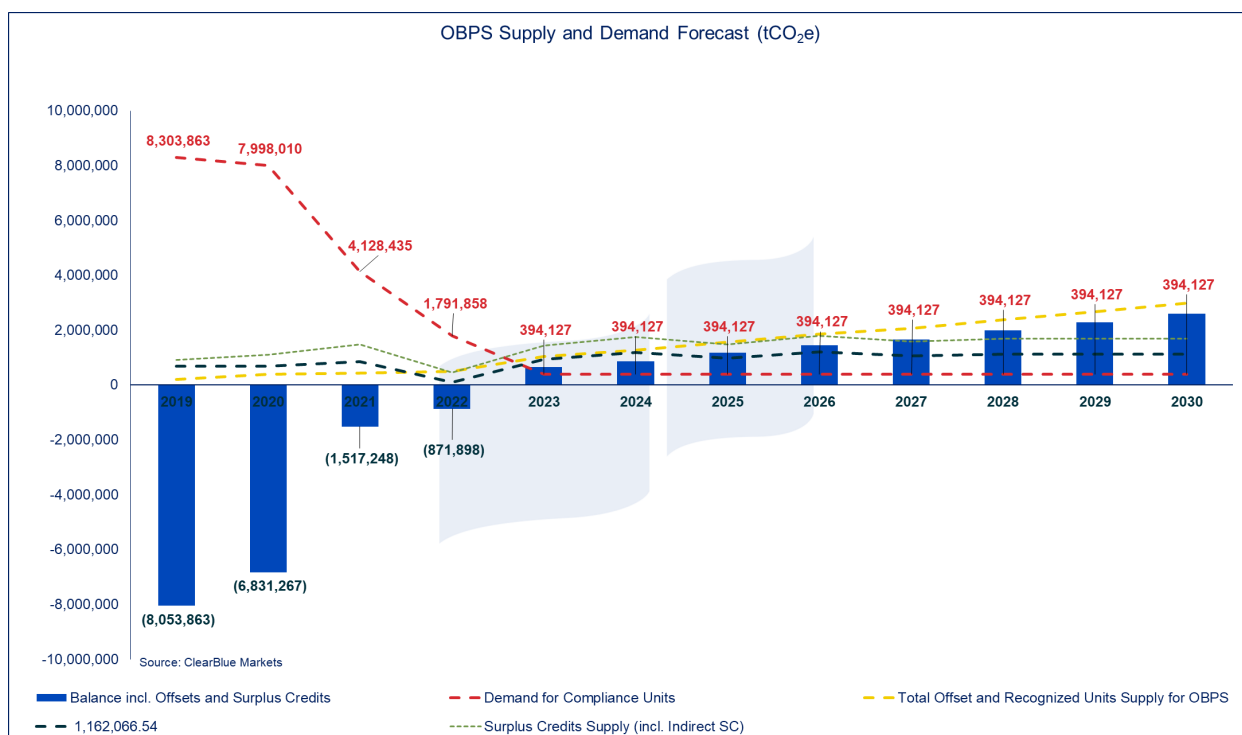


Figure 1: OBPS Supply and Demand Forecast (tCO<sub>2</sub>e)

## Useful Links

[Environment and Climate Change Canada, Pan-Canadian Framework on Clean Growth and Climate Change](#)

[Environment and Climate Change Canada, Pricing pollution: how it will work](#)

[Environment and Climate Change Canada, Output-Based Pricing System](#)

[Environment and Climate Change Canada, Technical paper: federal carbon pricing backstop](#)

[Environment and Climate Change Canada, Review of the federal Output-Based Pricing System Regulations](#)



[Environment and Climate Change Canada, Federal GHG Offset System](#)

[Environment and Climate Change Canada, List of Recognized Offset Programs and Protocols for the Federal OBPS](#)

[The Federal Carbon Pollution Pricing Benchmark](#)

[Review of the OBPS Regulations: Consultation Paper](#)

[Environment and Climate Change Canada, List of recognized additional industrial activities under the OBPS](#)

[Environment and Climate Change Canada, The Policy regarding voluntary participation in the OBPS](#)

[Environment and Climate Change Canada, The Policy for recognizing additional industrial activities from sectors at significant risk of carbon leakage and competitiveness impacts](#)

[Environment and Climate Change Canada, Quantification Methods for the Output-Based Pricing System Regulations – December 2023](#)

## References

[Environment and Climate Change Canada, Canadian Environmental Sustainability Indicators: Progress towards Canada's greenhouse gas emissions reduction target](#)

[Minister of Environment and Climate Change Canada Mandate Letter](#)

[Environment and Climate Change Canada, Output-Based Pricing System Regulations](#)

<https://www.canada.ca/en/environment-climate-change/news/2022/11/the-government-of-canada-strengthens-pollution-pricing-across-the-country.html>

<https://canadagazette.gc.ca/rp-pr/p1/2022/2022-10-29/html/reg2-eng.html>

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