

# Canada Federal Output-Based Pricing System

## General Information

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### ETS Description

Since 2019, carbon pricing has been in place across all Canadian provinces and territories. Based on the “Pan-Canadian Approach to Pricing Carbon Pollution” adopted in 2016, Canadian jurisdictions have the flexibility to design and implement their own pricing system tailored to local needs, provided it meets minimum national stringency criteria (known as the “federal benchmark”). To meet the federal benchmark, provinces, and territories may design several types of carbon pricing systems, including:

- an explicit price-based system;
- a carbon levy on fossil fuels; or
- a combination (“hybrid”) of a carbon levy on fossil fuels and an intensity-based emissions trading system (ETS) for industrial emitters.
- a cap-and-trade system.

In accordance with the 2021 update of the Pan-Canadian Approach to Pricing Carbon Pollution, the minimum national carbon price was set at CAD 65 (USD 48.15) in 2023, increasing by CAD 15 (USD 11.11) each year to reach CAD 170 (USD 125.93) in 2030.

A **federal carbon pollution pricing “backstop” system** applies in jurisdictions that request it or that do not implement systems that meet the federal benchmark.

Based on the “Greenhouse Gas Pollution Pricing Act” (GGPPA), adopted in 2018, the federal backstop system has been in place since 2019, and comprises two parts:

1. A regulatory charge on fossil fuels, such as gasoline and natural gas, known as the **fuel charge**. Generally, the fuel charge applies early in the supply chain and is payable by a registered producer or distributor. The fuel charge started at CAD 20 (USD 14.81) per tCO<sub>2</sub>e in 2019 and increased annually by CAD 10 (USD 7.40), until it reached CAD 50 (USD 37.03) per tCO<sub>2</sub>e in 2022. The updated fuel charge started at CAD 65 (USD 48.15) from April 2023, and increases by CAD 15 (USD 11.11) each year until it reaches CAD 170 (USD 125.93) in 2030.
2. A performance-based system for industries, known as the **federal Output-Based Pricing System (OBPS)**.

The federal OBPS is designed to maintain the carbon price signal for industrial emitters to reduce their GHG emissions while mitigating the risk of carbon leakage and competitiveness impacts. It applies to facilities in the emissions-intensive and trade-exposed (EITE) industrial and electricity sectors that emit equal to or more than 50,000 tCO<sub>2</sub>e. Smaller facilities with annual emissions equal to or more than 10,000 tCO<sub>2</sub>e from sectors at risk of carbon leakage and adverse competitiveness impacts can apply to participate voluntarily.

The OBPS sets a performance (output-based) standard (i.e., GHG emissions per unit of output) based on the national production-weighted average emissions intensity for a given activity in covered sectors. Facilities calculate a limit based on their level of production and the appropriate standard(s) and are required to provide compensation for emissions that exceed this limit. Those performing better than the standard are issued surplus credits (compliance units) that they can sell or save to use later. Facilities can comply by: (1) remitting surplus credits purchased from other facilities or retained from previous periods; (2) paying the carbon price; or (3) remitting eligible offset credits.

### ETS Status

in force

## Jurisdictions

Canada

## Year in Review

All Canadian provinces and territories had until September 2022 to either request the federal carbon pollution pricing system or propose their own plan for a carbon pricing system for 2023 to 2030 that meets the updated benchmark criteria. Systems that have been approved by the federal government remain in place until at least the end of 2026 for OBPS; the same applies for jurisdictions where the federal backstop is in place. As of the beginning of 2024, the federal OBPS applies in Manitoba, Nunavut, Prince Edward Island, and Yukon.

The federal government amended its federal “backstop” OBPS in November 2023 to increase the stringency of the output-based standards used to determine facilities’ emissions limits. The rates are now set to decline at a fixed tightening rate with no end date: 2% annual tightening rate for most industrial facilities’ output-based standards and 1% for high-risk EITE facilities. Twelve new output-based standards for industrial activities have also been added to the regulations.

By 2026, the federal government will review all provincial carbon pricing programs to ensure that they still meet the federal benchmark requirements for 2027 to 2030. An interim review of the federal benchmark will also be undertaken by 2026.

## Sectoral coverage

Industry

Power

## Revenue usage

General budget, including debt reduction

Low-carbon innovation

Pursuit of other development objectives, such as education and health

Assistance for individuals, households, and businesses

## Emissions & Targets

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### Overall GHG Emissions excl. LULUCF (MtCO<sub>2</sub>e)

670 MtCO<sub>2</sub>e (2021)

### GHG reduction targets

**By 2030:** 40-45% below 2005 levels (NDC)

**By 2050:** Climate neutrality (Canadian Net-Zero Emissions Accountability Act)

### Current Allowance Price (per t/CO<sub>2</sub>e)

CAD 65 (USD 48.15)

## Size & Phases

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### Covered emissions (2020)

9.00%

### Verified ETS Emissions

56.50MtCO<sub>2</sub>e

### GHGs covered

CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFCs, PFCs

### Cap or total emissions limit

No explicit emissions cap.

### Sectors and thresholds

**INCLUSION THRESHOLDS:** Coverage is mandatory for facilities in the EITE industrial and electricity sectors that emit equal to or more than 50,000 tCO<sub>2</sub>e per year. Smaller facilities with annual emissions equal to or more than 10,000 tCO<sub>2</sub>e from sectors at risk of carbon leakage and adverse competitiveness impacts can opt in to participate voluntarily.

### Point of regulation

Point source (industry, power)

### Type of entities

Facilities

### Number of entities

In 2023, 37 facilities were covered under the federal OBPS (14 mandatory and 23 voluntary facilities).

## Allowance Allocation & Revenue

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### Allowance allocation

Allocation is determined in relation to annual emissions limits based on emissions intensity benchmarks (standards) called Output-based standards. These benchmarks are primarily set using the production-weighted average emissions intensity of all facilities making similar products across Canada.

Each covered facility then calculates an annual emissions limit based on its level of production and the relevant output-based standards.

Facilities that emit less than their emissions limit receive surplus credits (compliance units) for free, corresponding to the number of tCO<sub>2</sub>e below the limit. This is similar to free allocation based on benchmarks. These surplus credits can be banked or sold to entities that emit more than their emissions limits (see below for more details).

### Total Revenue

CAD 400 million (USD 296.30 million) for compliance years 2019 and 2020

CAD 236 million (USD 174.81 million) in 2020

2020

### Use of Revenues

For provinces that voluntarily opt for the federal system, all proceeds from the federal OBPS are returned directly to the jurisdiction of origin for use according to their needs.

In other provinces where the federal system applies, proceeds from the OBPS in these jurisdictions are returned to the provinces or territories through the OBPS Proceeds Fund to support low-carbon technology deployment.

## Flexibility & Linking

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### Offset credits

The use of offset credits is allowed.

**QUALITATIVE LIMITS:** Two types of offset credits can be used for compliance under the OBPS: recognized units, and federal GHG offset credits. Both types of credits must have been issued for projects taking place in Canada that began in 2017 or later.

Recognized units are offset credits issued by a province or territory under a recognized offset program and offset protocol and meet the requirements under section 78 of the OBPS including: have been issued for projects located in Canada and that began in 2017 or later; be valid (not having been suspended, invalidated or revoked); have been issued for an offset project that is registered in a recognized provincial offset program under a recognized offset protocol that appear on the List of Recognized Offset Programs and Protocols for the

Federal OBPS; have been verified; be eligible for use as a method of compensation or compliance with respect to a pricing mechanism for GHG emissions in the province in which it was issued; and be designated for use exclusively as a compliance unit to be surrendered under the federal OBPS.

Federal GHG offset credits are issued under Canada's GHG offset credit system and federal offset protocols are applicable in all provinces and territories in Canada, except for jurisdictions where the same project activity is covered by an active protocol in a provincial or territorial offset program. As of 2023, there are two protocols under the federal GHG offset credit system: landfill methane recovery and destruction, and reduction of GHG emissions from refrigeration systems. To be eligible for use under the OBPS, both types of credits must have been issued for reductions or removals that took place at most eight years before being surrendered or before the deadline for surrendering.

**QUANTITATIVE LIMITS:** Since 2022, at least 25% of the compliance obligation must be met in the form of excess emissions charge payment.

In the 2019 and 2020 compliance periods, no recognized units or federal GHG offset credits were remitted for compliance.

### **Banking and borrowing**

Surplus credits may not be surrendered for compliance if they were issued more than five years before being surrendered.

Borrowing is not included.

### **Links with other Systems**

The Canada federal OBPS currently has a one-way linkage via recognized units with Alberta and British Columbia's offset system.

## **Compliance**

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### **Compliance mechanism**

An entity can meet its compliance obligations by either making an excess emissions charge payment at the federally established carbon price or purchasing and remitting surplus credits (compliance units) from other covered facilities or use federal offset credits or recognized units (eligible offset credits from recognized provincial programs and protocols – see 'Offset Credits').

From 2022, at least 25% of the compensation must be provided in the form of excess emissions charge payment.

For compliance provided by the regular-rate compensation deadline, the compensation required per tCO<sub>2</sub>e of excess emissions is one compliance unit or payment of the excess emissions charge. If provided after the regular-rate compliance deadline, four compliance units or payment at four times the applicable excess emissions charge are required per tCO<sub>2</sub>e of excess emissions.

### **Compliance Period**

One year. The regular-rate compensation deadline is 15 December of each calendar year after the emissions have happened. The increased-rate compensation deadline is 15 February of the year following the regular-rate compensation deadline.

### **Monitoring, Reporting, Verification (MRV)**

**MONITORING:** Covered entities must monitor their emissions, production levels, and captured and stored emissions on an annual basis. For covered entities, monitoring of production has to happen with respect to each of the regulated industrial activities. Electricity generators must monitor their emissions and electricity production for each unit and in aggregate.

**REPORTING:** 1 June of the calendar year following the end of the compliance period for which the annual report is prepared, along with a verification report. Reports must also include the GHG emissions limit applicable to the covered entity for the compliance period, and the difference (if any) between the emissions limit and the actual emissions.

**VERIFICATION:** Reports must be verified by accredited third parties.

**FRAMEWORK:** The information to be included in an annual report is set out in the OBPS Regulations. Starting with 2024, the "Quantification Methods for the Output-Based Pricing System Regulations" specifies the methods to quantify GHGs, the ratio of heat and the quantity of electricity generated.

### **Enforcement**

If a facility fails to provide compensation by the 15 December of each calendar year after the emissions have happened, it must provide

compensation by the increased-rate compensation deadline of 15 February of the year following the regular-rate compensation deadline. The increased-rate compensation is four times the regular rate. Failing to provide compensation by the increased-rate compensation deadline is an offence under the Act and is also a violation that can proceed under the [Environmental Violations Administrative Monetary Penalties Act](#) (EVAMPA).

## Market Regulation

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### Market Stability Provisions

The excess emissions charge compliance option acts as a price ceiling for the system (see ‘Compliance Mechanism’). The excess emissions charge payment is set at CAD 80 (USD 59.26) in 2024, and will increase by CAD 15 (USD 11.11) annually until it reaches CAD 170 (USD 125.93) per tCO<sub>2</sub>e in 2030.

### Market Design

**MARKET PARTICIPATION:** Compliance entities including mandatorily and voluntarily covered entities (for inclusion thresholds see ‘Sectors and Thresholds’.)

Regulatory provisions allow for other market participants and offset proponents to open accounts in the Credit and Tracking System (CATS).

### MARKET TYPES:

**Primary:** Surplus credits are issued by the government to facilities based on their performance compared to the applicable output-based standards. Surplus credits are not auctioned.

**Secondary:** Covered entities may purchase surplus credits from other covered entities that have outperformed their compliance obligation. Other market participants and offset proponents may also participate in this market. Transactions take place in CATS, where users can post messages declaring their intent to buy or sell units, as well as answer to posted messages and transfer credits.

### LEGAL STATUS OF ALLOWANCES:

The legal nature of surplus credits is not specified in the Output Based Pricing System Regulations.

## Other Information

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### Institutions involved

**Environment and Climate Change Canada:** Responsible for the design, coordination, implementation and monitoring of Canada’s climate action plans and targets, and the implementation of the federal carbon pollution pricing backstop system; specifically, the federal carbon pricing system for industry (the OBPS), in provinces and territories where it applies.

### Regulatory Framework

[Output-Based Pricing System Regulations](#)

[Regulations Amending the OBPS Regulations, November 2023](#)

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

[A Healthy Environment and a Healthy Economy](#)

[Update to the Pan-Canadian Approach to Carbon Pollution Pricing 2023-2030](#)

[Greenhouse Gas Pollution Pricing Act](#)

[Net-Zero Emissions Accountability Act](#)

### Evaluation / ETS review

By 2026, an interim review of the federal benchmark will take place to ensure that the existing benchmark criteria are still sufficient. The federal government will involve provinces, territories and Indigenous organizations in the review process.

[2023 Progress Report on the 2030 Emissions Reduction Plan](#)

[Greenhouse Gas Pollution Pricing Act – Annual Report to Parliament for 2021](#)

[Pan-Canadian Approach to Pricing Carbon Pollution – Interim Report 2020](#)

[Greenhouse Gas Pollution Pricing Act Annual Report for 2020](#)

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