

# 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 provinces and territories 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 47.50) in 2023, increasing by CAD 15 (USD 10.95) each year to reach CAD 170 (USD 124.15) in 2030.

The national carbon price is CAD 95 (USD 69.38) in 2025.

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 14.60) per tCO<sub>2</sub>e in 2019 and increased annually by CAD 10 (USD 7.30), until it reached CAD 50 (USD 36.50) per tCO<sub>2</sub>e in 2022. The updated fuel charge started at CAD 65 (USD 47.50) from April 2023 and increases by CAD 15 (USD 10.95) each year until it reaches CAD 170 (USD 124.15) 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 greater than or equal to 50,000 tCO<sub>2</sub>e. Smaller facilities with annual emissions greater than or equal to 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 provide compensation for GHG emissions that exceed the facility's annual emissions limit through one or an eligible combination of the following mechanisms:

- (1) making an excess emissions charge payment to the Government of Canada at the current national carbon price;
- (2) remitting surplus credits purchased from other facilities or retained from previous periods;
- (3) remitting eligible offset credits from a recognized provincial system or remitting federal 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. Provincial systems that have been approved by the federal government remain in place until at least the end of 2026; the same applies for jurisdictions where the federal backstop is in place. As of the beginning of 2025, 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 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 were also added to the regulations.

In November 2024, the government proposed amendments to enable the cross-recognition of certain Canadian offset credits under the federal OBPS and the proposed "Oil and Gas Sector GHG Emissions Cap Regulations". The changes would allow for the same offset credit (federal or eligible provincial offset credit) to be remitted by the same operator under both systems for coinciding remittance obligations and under the conditions set in the proposed 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

## **Emissions & Targets**

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

708 MtCO<sub>2</sub>e (2022)

#### **GHG reduction targets**

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

**By 2035:** 45-50% below 2005 levels (Canadian Net-Zero Emissions Accountability Act)

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

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

CAD 80 (USD 58.42)

## Size & Phases

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### Covered emissions (2021)

8.00%

### Verified ETS Emissions

56.90MtCO<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

The federal OBPS does not set a binding limit or cap on emissions. The federal OBPS is designed to preserve the marginal price incentive of a carbon price while mitigating carbon leakage and adverse competitiveness impacts risks to reduce emissions.

### Sectors and thresholds

**SECTORS:** Power and industry

**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 2024, 38 facilities were covered under the federal OBPS (14 mandatory and 24 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. Facilities that emit more than their emissions limit must provide compensation only for emissions above their emissions limit. This is similar to free allocation based on benchmarks. Surplus credits can be banked or sold to entities that emit more than their emissions limits (see below for more details).

### Total Revenue

CAD 697 million (USD 508.9 million) for compliance years 2019 to 2021

CAD 295 million (USD 215.4 million) in 2021

2021

### Use of Revenues

Provinces that voluntarily adopted the federal OBPS could opt for a direct transfer of all proceeds from the federal OBPS to the jurisdiction of origin for use according to their needs. These revenues can be added to the general budget of the jurisdiction and used for any purpose at the province/territory's discretion.

In provinces where the federal system has been applied and not requested, proceeds from the OBPS are returned to the provinces or territories through the OBPS Proceeds Fund to support low-carbon technology deployment.

The total amount of proceeds collected by the federal government in excess emissions charge payment under the OBPS for the 2021 compliance period was approximately CAD 295 million (USD 215.4 million).

## 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:

having been issued for projects located in Canada that began in 2017 or later; being valid (not having been suspended, invalidated, or revoked); having 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; having been verified; being 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.

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 October 2024, there are three protocols under the federal GHG offset credit system: landfill methane recovery and destruction, reduction of GHG emissions from refrigeration systems, and improved forest management on private land.

To be eligible for use under the OBPS, federal offset credits and recognized units must have been issued no earlier than 2017 and for reductions or removals that took place less than eight years before being surrendered or before the deadline for surrendering.

**QUANTITATIVE LIMITS:** Since 2022, at least 25% of the compensation required for a facility's excess emissions must be met in the form of an excess emissions charge (EEC) payment.

In the 2021 compliance period, no federal GHG offset credits were remitted for compliance. In 2021, 81% of compliance was achieved through compensation as EEC payments, 19% through surplus credits, and 0.03% through recognized units.

### Banking and borrowing

Banking is allowed, but surplus credits may not be surrendered for compliance if they were issued more than five years before being surrendered.

Borrowing is not allowed.

### Links with other Systems

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

### Other carbon pricing instruments in the jurisdiction

The following sub-national jurisdictions have a carbon tax or cap-and-trade system that meets the federal benchmark:

- British Columbia: carbon tax and OBPS
- The Northwest Territories: carbon tax
- Québec: cap-and-trade

The following sub-national jurisdictions have OPBSs for industry that meet the federal benchmark (in addition, the federal fuel charge applies here to consumer fuels):

- Alberta: Technology Innovation and Emissions Reduction regulation (TIER)

- New Brunswick: OBPS
- Newfoundland and Labrador: carbon pricing system for large industry
- Nova Scotia: OBPS for Industry
- Ontario: Emissions Performance Standards Program
- Saskatchewan: OBPS Program

In November 2024, the federal government published proposed “Oil and Gas Sector GHG Emissions Cap Regulations” that would implement a sector-specific cap-and-trade system on all Canadian facilities engaging in activities in the upstream oil and gas sector and LNG production, and would complement – not replace – the existing federal and provincial industrial pricing systems in this sector. Final regulations are targeted for 2025, with registration and reporting proposed to be required for 2026 onward and the emissions cap proposed to come into force from 2030.

## Compliance

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### Compliance mechanism

Facilities that have exceeded their annual emissions limit are required to remit compensation for the GHG emissions above the limit. This compensation can be provided in the form of making an excess emissions charge (EEC) payment at the federally established carbon price, remitting surplus credits that were banked from earlier compliance periods or purchased from other covered facilities, or using federal offset credits or recognized units (eligible offset credits from recognized provincial programs and protocols – see ‘Offset Credits’) for each tCO<sub>2e</sub> by which the emissions limit was exceeded.

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

### Compliance Period

One year. The regular-rate compensation deadline is 15 December of each calendar year after the emissions occurred. 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 must 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:** Reports must be submitted by 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 for quantifying GHGs, the ratio of heat and the quantity of electricity generated.

### Penalties and enforcement

If a facility fails to provide compensation by the 15 December of each calendar year after the emissions occurred, 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](#)”.

## Market Regulation

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### Market Stability Provisions

#### OBPS Proceeds Fund

**Instrument type:** Set price or price trajectory

**Functioning:** The excess emissions charge (EEC) compliance option acts as a price ceiling for the system (see ‘Compliance Mechanism’). The EEC payment is set at CAD 95 (USD 69.38) in 2025 and will increase by CAD 15 (USD 10.95) annually until it reaches CAD 170 (USD 124.15) per tCO<sub>2e</sub> in 2030.

### **Market Design**

**MARKET PARTICIPATION:** Compliance entities include mandatory and voluntary participants (for inclusion thresholds, see ‘Sectors and Thresholds’). Regulatory provisions allow 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 OBPS Regulations.

## **Other Information**

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### **Institutions involved**

**Environment and Climate Change Canada (ECCC):** 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. ECCC is also administering the OBPS Proceeds Fund, which assists the return of OBPS proceeds to their jurisdiction of origin in some jurisdictions.

### **Regulatory Framework**

[Greenhouse Gas Pollution Pricing Act](#)

[Output-Based Pricing System Regulations](#)

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

[Proposed Regulations Amending the OBPS Regulations, November 2024](#)

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

### **Evaluation / ETS review**

By 2026, an interim review of the federal benchmark will take place to ensure that pricing stringency is aligned across all carbon pricing systems in Canada through 2027 to 2030. The federal government will also assess all existing provincial and territorial carbon pricing systems to confirm they continue to meet the benchmark criteria, including any updates due to the interim review, for 2027 to 2030. Provinces and territories where the federal system currently applies will have the opportunity to implement their own system that meets the federal benchmark for this period if they wish to. 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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