Canada - Nova Scotia Output-Based Pricing System for Industry

General Information

ETS Description

The Nova Scotia Output-Based Pricing System for Industry (Nova Scotia OBPS) is part of the province's approach to reduce GHG emissions from large industrial facilities. Similar to the federal carbon pricing system in Canada, it aims to lower emissions while maintaining economic competitiveness and minimizing carbon leakage.

The Nova Scotia OBPS was approved by the Canadian federal government in November 2022 and began operating in 2023. It replaced Nova Scotia's cap-and-trade program, which had been in place since 2019 but was officially phased out after the final compliance deadline in December 2023.

The Nova Scotia OBPS is mandatory for facilities with annual emissions equal to or more than 50,000 tCO_2e. Other facilities under this threshold with annual emissions of ≥10,000 tCO_2e/year have the option to voluntarily join the system. If not, they would be subject to the Canada federal fuel charge.

The Nova Scotia OBPS sets facility-level emissions-intensity standards (performance standards) for electricity generators and large industrial emitters. Covered entities must surrender allowances (compliance units) for emissions that exceed the facility's annual emissions limit. The annual emissions limit is based on an emissions intensity benchmark. If a facility's emissions are below its limit, it earns performance credits (compliance units), which can be banked for future use or sold.

ETS Status

in force

Jurisdictions

Nova Scotia

Year in Review

The Nova Scotia OBPS began operating in 2023, replacing Nova Scotia's cap-and-trade program which had been in place since 2019. The cap-and-trade program was phased out in 2023, officially ending after the final compliance deadline for the 2019 to 2022 trading period in December. The system's final auction was held in August, which saw the smallest number of bidders and steepest undersubscription rate ever as it cleared at the system's floor price.

While the cap-and-trade program set an overall cap on emissions each year, the OBPS allows emissions to increase over time if production increases. However, the Nova Scotia Department of Environment points out that the OBPS standards will become more stringent over time.

Final regulations and standards around reporting, applicable performance standards for industry and the electricity generation sector, and compliance are under development and are expected to be released in the first quarter of 2024.

Sectoral coverage

Industry
Power

Revenue usage

Climate mitigation
Low-carbon innovation

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)

14,6 MtCO_2e (2021)

GHG reduction targets

By 2030: 53% reduction below 2005 levels (Environmental Goals and Climate Change Reduction Act)

By 2050: Net-zero emissions (Environmental Goals and Climate Change Reduction Act)

Current Allowance Price (per t/CO2e)

CAD 65 (USD 48.15)

Size & Phases

GHGs covered

CO2, CH4, N2O, SF6, NF3, HFCs, PFCs

Cap or total emissions limit

The total emission limit under the Nova Scotia OBPS is the sum of the annual emissions limits based on emissions intensity benchmarks for all individual covered entities. The limit is therefore not set ex-ante and is only known after the compliance period ends.

Sectors and thresholds

INCLUSION THRESHOLDS: Coverage is mandatory for facilities in the industrial and power sectors emitting ≥50,000 tCO_2e/year. Facilities under this threshold with annual emissions of ≥10,000 tCO_2e/year are permitted to opt-in to the Nova Scotia OBPS.

Point of regulation

Point source (industry, power).

Type of entities

Facilities

Number of entities

15 (8 of which are voluntary market participants) in 2023

Allowance Allocation & Revenue

Allowance allocation

Allocation is determined in relation to annual emissions limits based on facility-level emissions-intensity standards (performance standards) set by the Nova Scotia OBPS.

Emissions up until the benchmark do not require payment, with only the surplus triggering the compliance obligation. Entities that emit less than their emissions limit receive performance credits (compliance units) free of charge, corresponding to the number of tonnes of CO_2e below the limit. This is similar to free allocation based on benchmarks. These performance credits can be banked as a way to meet future obligations, or they can be sold to other regulated entities that emit more than their emissions limits (see below for more details).

Use of Revenues

Revenues may be directed to the Nova Scotia Climate Change Fund, which funds a variety of GHG reduction programs and low-carbon innovation projects. Final regulations are expected to be released in the first quarter of 2024.

Flexibility & Linking

Offset credits

The use of offset credits is allowed to fulfil a facility's compliance obligation. Regulations still need to be finalized.

Banking and borrowing

Performance credits can be banked, transferred or retired by facilities subject to the Nova Scotia OBPS regulations to meet their reduction requirements.

Links with other Systems

The Nova Scotia OBPS is not linked with any other system. However, covered facilities can become eligible for certain exemptions from the Canada federal fuel charge.

Compliance

Compliance mechanism

Covered entities must surrender one compliance unit per tCO_2e that exceeds the facility's annual facility-level emissions-intensity standards set by the Nova Scotia OBPS.

A facility can meet its compliance obligations by paying into the Nova Scotia Climate Change Fund to obtain fund credits, purchasing and remitting performance credits from other regulated facilities or using offset credits.

The price of the fund credits and of the performance credits follow the federal government's backstop carbon price, which is 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 tonne in 2030.

Compliance Period

One year. The first compliance period for a regulated facility is the first year in which the facility becomes subject to the regulations.

Monitoring, Reporting, Verification (MRV)

REPORTING: GHG emission reports must be submitted.

VERIFICATION: These reports must be verified in accordance with the regulations.

Enforcement

If a covered facility fails to provide compensation, it must pay the amount of the obligation shortfall into the Nova Scotia Climate Fund. Obligations that remain unpaid will be subject to an interest rate set out in the Nova Scotia "Revenue Act Regulations" made under the "Revenue Act".

Market Regulation

Market Stability Provisions

INSTRUMENT NAME: Nova Scotia Climate Fund (price ceiling)

TRIGGERS: To compensate for emissions exceeding the facility's annual emissions limit, facilities can pay into the Nova Scotia Climate Change Fund to obtain fund credits. The price paid into the Fund acts as a price ceiling and is aligned with the federal minimum carbon price (CAD 65 [USD 48.15] in 2023). The price increases by CAD 15 (USD 11.11) each year until 2030, resulting in a price of CAD 170 (USD 125.93) per tCO_2e in 2030.

Market Design

MARKET PARTICIPATION:

Compliance entities including mandatorily and voluntarily covered entities (for inclusion thresholds see 'Sectors and Thresholds' section.)

MARKET TYPES:

Primary: Compliance units are currently not auctioned.

Secondary: Covered entities may purchase performance credits from other covered entities that have outperformed their compliance obligation.

Other Information

Institutions involved

Nova Scotia Environment and Climate Change:

Responsible for establishing the regulatory framework, implementing the NS OBPS, and providing compliance and enforcement services for the NS OBPS.

Regulatory Framework

Part XIB of the NS Environment Act

Output-Based Pricing System Reporting and Compliance Regulations

Output-Based Pricing System Reporting and Compliance Standard

Output-Based Pricing System Registration and Opt-in Regulations made under Section 112ZJ of the Environment Act

Evaluation / ETS review

A progress report must be published no later than one year following the end of the first compliance year of 2023.

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