

Switzerland Emissions Trading System

General Information

ETS Description

The Switzerland (Swiss) ETS started in 2008 with a five-year voluntary phase. Thereafter, participation was mandatory for large, energy-intensive entities and voluntary for medium-sized entities. The Swiss ETS covered about 12% of the country's total GHG emissions in 2022 (including aviation). Participants in the ETS are exempt from the national CO₂ levy.

The Swiss ETS covers electricity generation, industrial entities (largely comprising companies from the cement, chemicals, pharmaceuticals, paper, refining, and steel sectors), domestic aviation, and flights to the European Economic Area and the United Kingdom. Allowances are allocated through benchmarking and auctioning. Free allocation for aviation is being phased-out by 2026. Auctioning volumes may be reduced if the total number of allowances in circulation exceeds a certain threshold.

The Swiss ETS has been linked with the EU ETS since January 2020. The same benchmarks as in the EU ETS apply to entities covered by the Swiss ETS.

The system is mandated by the Federal Act on the Reduction of CO₂ Emissions ("CO₂ Act") and regulated through an implementing regulation ("CO₂ Ordinance").

ETS Status

in force

Jurisdictions

Switzerland

Year in Review

In March 2024, the Parliament approved a revised CO₂ Act for the period from 2025 to 2030, setting 2030 emissions targets and introducing national and sectoral measures to meet them. The law entered into force at the start of January 2025, thereby aligning the Swiss ETS with the revised EU ETS. The CO₂ Ordinance implementing the act underwent public consultation from July to October 2024 and will be set into force in spring 2025 with retroactive effect.

For stationary installations and aviation, the same linear reduction factors as in the EU ETS apply to reduce the respective caps for the period 2024 to 2030. Additionally, carbon capture and storage, and under certain conditions, foreign biogas use, can now be accounted for in the ETS. In aviation, free emission allowances for operators are phased out by 2026 in accordance with the rules in the EU ETS.

Sectoral coverage

Domestic Aviation

Industry

Power

Revenue usage

Climate mitigation

Low-carbon innovation

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO₂e)

41.6 MtCO₂e (2022)

GHG reduction targets

By 2030: At least 50% reduction from 1990 GHG levels (NDC and CO₂ Act)

By 2050: Net-zero GHG emissions (NDC and “Climate and Innovation Act”)

Current Allowance Price (per t/CO₂e)

EUR 60.19 (USD 65.15) (average auction price in 2024)

Size & Phases

Covered emissions (2022)

13.00%

Verified ETS Emissions

5.40MtCO₂e

GHGs covered

CO₂, N₂O, CH₄, HFCs, NF₃, SF₆, PFCs*

* In principle, all these gases are covered in accordance with the CO₂ Ordinance. In practice, only CO₂, N₂O, and PFCs require monitoring, as the share of the other gases is negligible.

Phases

VOLUNTARY PHASE: Five years (2008 to 2012)

SECOND TRADING PERIOD: Eight years (2013 to 2020)

THIRD TRADING PERIOD: Ten years (2021 to 2030)

Cap or total emissions limit

A cap limits the total emissions allowed in the system.

VOLUNTARY PHASE: Each participant received its own entity-specific reduction target.

SECOND TRADING PERIOD:

Stationary installations: Overall top-down cap of 5.6 MtCO₂e (2013) that was reduced annually by a constant linear reduction factor of 1.74% (of baseline emissions set by entities’ historical data of the years 2008-2012) to 4.9 MtCO₂e in 2020.

Aviation: 1.3 MtCO₂ (2020)

THIRD TRADING PERIOD: An annual linear reduction factor of 2.2% (2010 base year) applied to the cap for stationary installations and to the aviation cap from 2021 to 2023. As from 2024 the effective linear reduction factor is 4.3% and 4.4% as from 2028.

Sectors and thresholds

MANDATORY PARTICIPATION: Industries listed under Annex 6 of the CO₂ Ordinance must participate in the Swiss ETS. These include 25 categories, such as cement, chemicals and pharmaceuticals, refineries, paper, district heating, steel, and other sectors. Since 2020, the ETS has covered emissions from aviation (domestic and outbound flights to the EEA or the UK) and fossil-thermal power plants.

INCLUSION THRESHOLDS: Threshold values apply to most activities in terms of production capacity or total rated thermal input.

POSSIBLE VOLUNTARY OPT-IN: Industries with a total rated thermal input of ≥ 10 MW. A company that fulfils the participation conditions must submit the application within the following six months.

POSSIBLE OPT-OUT: Industries with a total rated thermal input greater than 20 MW but emissions below 25,000 tCO₂e in each of the past three years. If an entity's future emissions rise above the threshold in a given year, it must participate in the ETS starting from the following year and cannot opt out for the remainder of the compliance period. New entrants can apply for an opt-out with immediate effect if they can credibly report their emissions to be below 25,000 tCO₂e/year.

AVIATION: Commercial aircraft operators emitting more than 10,000 tCO₂/year or operating ≥ 243 flights in a four-month period in the preceding year. Non-commercial operators are included when emitting more than 1,000 tCO₂/year. The thresholds do not apply if the operator has obligations under the EU ETS.

Point of regulation

Point source

Type of entities

Installations (power and industry) and companies (aviation)

Number of entities

Stationary installations: 95 (2024)

Aircraft operators: 205 (2023)

Allowance Allocation & Revenue

Allowance allocation

VOLUNTARY PHASE: Participants received free allowances covering emissions up to their entity-specific emissions target.

SECOND TRADING PERIOD:

Free allocation: Free allocation was based on industry benchmarks. Free allocations for sectors not exposed to the risk of carbon leakage were phased out gradually. In 2013, these entities received 80% of their allowances for free, which was reduced to 30% by 2020.

A correction factor was implemented to reduce the allocated emissions allowances, determined by industry benchmarks and ensuring they aligned with the specified overall emissions cap.

Free allocation for aircraft operators was based on tonne-kilometer data for 2018 reported by individual aircraft operators, multiplied by the benchmark of 0.642 emissions allowances per 1,000 tonne-kilometers (same benchmark as in the EU ETS).

Auctioning: Allowances that were not allocated for free were auctioned. Auctions took place two or three times a year, depending on available auction volumes. Since January 2020, auctions are open to entities covered by the Swiss ETS and the EU ETS, as well as to non-compliance entities allowed to place bids in the EU ETS. In line with EU ETS legislation, the Federal Office of the Environment (FOEN) has the authority to cancel the auction if the clearing price is significantly below the prevailing secondary market price of the EU ETS. In such a situation, allowances are transferred to subsequent auctions.

5% of the allowances are set aside in a reserve for new entrants and fast-growing operators.

Aviation: In line with EU ETS regulations, starting in 2020, 15% of aviation sector allowances are auctioned. 3% were placed in the

reserve dedicated to new and fast-growing operators. The remaining 82% was allocated according to sector-specific benchmarks

THIRD TRADING PERIOD:

Free allocation: As of 2022, the Swiss ETS applies the same allocation benchmarks as the EU ETS. Free allocation levels may be updated annually if production levels deviate at least 15 percentage points from the 2014 to 2018 base years. Free allocation in the aviation sector will be phased out by 2026, in line with the EU ETS regulation.

Auctioning: Since 2022, auction volumes have been subject to a market stability mechanism (see 'Market Stability Provisions' section).

Auctioning share

14%

Total Revenue

EUR 182.5 million (USD 207.3 million) since the beginning of the program

EUR 47.3 million (USD 51.2 million) in 2024
2024

Use of Revenues

From 2025, revenues from Swiss ETS auctions are earmarked to support *inter alia* the decarbonization of installations in the ETS and the mitigation of emissions from aviation.

Flexibility & Linking

Offset credits

The use of offset credits is not allowed.

QUALITATIVE LIMITS: Since 2021, offset credits cannot be used to meet compliance obligations. International offset credits were allowed up to 2020, subject to certain criteria. Most categories of credits from CDM projects in least developed countries were allowed. Credits from CDM and Joint Implementation projects from other countries were eligible only if registered and implemented before the end of 2012.

QUANTITATIVE LIMITS: During 2013 to 2020, the maximum amount of offset credits allowed into the system was set at 11% of average emissions allowances allocated in the voluntary phase, minus offset credits used in that same time period, multiplied by five.

Industries that entered the Swiss ETS in the second trading period could surrender offsets to cover up to 4.5% of their emissions. For aircraft operators, the quantitative limit was set at 1.5%.

Banking and borrowing

Banking within and across phases is allowed without limits. Banked allowances from Phase 3 of the EU ETS can be used for compliance in the 2021 to 2030 trading phase.

Borrowing across phases is not allowed. Within a phase, allocated allowances from the current trading year may be used for surrender obligations of the prior year.

Links with other Systems

Switzerland concluded negotiations with the EU on linking their respective systems in 2015 and signed the agreement in 2017. Following legislative approval and ratification in 2019, the link entered into force in January 2020. Prior to that, revisions were made to align with the EU ETS legislative framework.

Covered entities in the Swiss ETS can use allowances from the EU ETS for compliance, and vice versa. The two systems run separate auctions. Market participants from the EEA need an account in the Swiss Emissions Trading Registry in order to participate. From 2024, allowance transfers between the EU and Swiss registries are executed on a daily basis, with specific exceptions for certain dates. The 2025 exception dates are published in the Emissions Trading Registry.

Other carbon pricing instruments in the jurisdiction

Compliance

Compliance mechanism

Covered entities must surrender one allowance per tCO₂e emitted for all their covered emissions.

Compliance Period

One calendar year. Covered entities have until the end of September of the following year to surrender allowances.

Monitoring, Reporting, Verification (MRV)

MONITORING: Monitoring plans are required for every installation and for every aircraft operator (no later than three months after the registration deadline). Monitoring plans must be approved by a competent authority. Emissions according to the Swiss CO₂ Ordinance (mainly CO₂ and N₂O) are subject to monitoring.

REPORTING: Annual monitoring report, based on self-reported information (by the end of March).

VERIFICATION: FOEN may order third-party verification of the monitoring reports from installations and can take random samples to ensure consistency. Aircraft operators must have their monitoring reports verified by an accredited third-party verifier.

Penalties and enforcement

The penalty for failing to surrender sufficient allowances is set at CHF 125/tCO₂ (USD 142.01/ tCO₂). In addition to the fine, entities must surrender the missing allowances in the following year.

Market Regulation

Market Stability Provisions

Market stabilisation mechanism

Instrument type: Quantity-based instrument

Functioning: The authorities introduced a mechanism in 2022 that reduces auction volumes if the quantity of emissions allowances in circulation exceeds a certain threshold.

If the number of allowances in circulation exceeds 50% of the cap of the previous year, the market stabilisation mechanism reduces the auction volume of the current year by 50%. In 2022, the mechanism reduced the auction volume from 460,000 to 230,000 and in 2023 from 580,000 to 290,000 allowances. In 2024, it reduced the auction volume from 820,000 to 410,000 allowances.

The unauctioned allowances lose their validity after the end of the compliance period. The mechanism is regularly reviewed against market dynamics and developments in the EU. The Swiss ETS is not subject to the EU ETS Market Stability Reserve.

Market Design

MARKET PARTICIPATION: Compliance entities, non-compliance entities (domestic and international) and individuals. Traders are subject to a holding limit of one million Swiss/EU allowances.

MARKET TYPES:

Primary: Single round sealed-bid uniform price auction, organized by the Swiss Emissions Trading Registry several times per year.

Secondary: Swiss allowances are not traded on regulated trading platforms but may be traded over the counter. EU ETS allowances, which can be used for compliance in the Swiss ETS, are traded on multiple exchanges, including ICE Futures and EEX.

LEGAL STATUS OF ALLOWANCES:

Allowances do not qualify as financial instruments under Swiss financial market regulations. Emissions allowances may form the underlying asset of derivative contracts which are covered by the “Financial Market Infrastructure Act”.

Other Information

Institutions involved

Federal Office for the Environment (FOEN): Implementing authority, e.g., responsible for the registry, for auctioning allowances, receiving emission reports and enforcing compliance.

Regulatory Framework

[Federal Act on the Reduction of CO₂ Emissions \(2022\)](#) (CO₂ Act)

[Revised Federal Act on the Reduction of CO₂ Emissions \(2025\)](#) (CO₂ Act)

[Ordinance on the Reduction of CO₂ Emissions](#) (CO₂ Ordinance)

Evaluation / ETS review

The full revision of the CO₂ Act was rejected in a popular vote in June 2021. A transitional extension of the Act for 2022 to 2024 was adopted in December 2021. A new revision of the Act that covers the period from 2025 to 2030 was adopted by the Swiss Parliament in March 2024 and entered into force on 1 January 2025. The new law provides for a linking-compatible revision of the ETS.

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