International Carbon Action Partnership

German National Emissions Trading System

General Information

ETS Description

Germany launched its national ETS (nETS, *Nationales Emissionshandelssystem*) for heating and transport fuels in 2021. With the introduction of the nETS, a wide range of sectors in Germany are now subject to a carbon price.

The nETS covers all fuel emissions not covered by the EU ETS. It is being phased in gradually, with an increasing fixed price per tCO_2 from 2021 to 2025. In 2026, auctions with minimum and maximum prices will be introduced. All main fuel types (gasoline, diesel, heating oil, natural and liquid gases) have been covered from the outset, while solid fuels such as coal have been included in 2023 and the incineration of waste in 2024. During the fixed price and price corridor phases, the cap is flexible. Covered entities must surrender allowances for all their covered emissions, and allocation is based on auctions.

The nETS was established through the 2019 “Fuel Emissions Trading Act”, which was amended in 2020, 2022 and again in 2023. It forms part of the “Climate Action Program 2030”, a package of measures adopted by the German Federal Cabinet to reach the country’s 2030 climate targets and aim for climate neutrality by 2045.

ETS Status

in force

Jurisdictions

Germany

Year in Review

In January 2024, Germany’s national ETS expanded to include waste incineration.

In February 2025, the German parliament adopted a law to transition from the nETS to the EU-wide ETS 2, a new emissions trading system for fuels, set to start in 2027. According to the law, Germany’s system will end on 31 December 2026 for most sectors, and the EU ETS 2 will begin on 1 January 2027. The law foresees making use of the “opt-in” option, which allows Member States to add sectors not covered in the European system. In addition to fuels used in transport, buildings, and small industries, Germany plans to opt-in fuels used in agriculture and rail transport (into EU ETS 2). However, the law does not extend the opt-in option to waste incineration, as the government is awaiting further EU-wide analysis on the effectiveness of carbon pricing in the waste sector. As a result, the waste sector will remain under the nETS after 2026 unless new provisions are introduced by then.4.

Sectoral coverage

Agriculture and/or forestry fuel use
Waste
Transport
Buildings
Industry

Revenue usage

Climate mitigation
Pursuit of other development objectives, such as education and health
Assistance for individuals, households, and businesses

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)

750 MtCO_2e (*2022*)

GHG reduction targets

By 2030: 65% reduction from 1990 GHG levels (“Climate Change Act”)

By 2045: Climate neutrality (Climate Change Act)

Current Allowance Price (per t/CO2e)

EUR 55 (USD 59.53)

Size & Phases

Covered emissions (2022)

39.00%

Verified ETS Emissions

291.10MtCO_2e

GHGs covered

CO2

Phases

PHASE 1: Ten years (2021-2030)

Cap or total emissions limit

A cap limits the total emissions allowed in the system.

PHASE 1: The cap is set in line with Germany’s reduction targets for the non-EU ETS sectors as defined by the “European Effort Sharing Regulation” (ESR). Given the revision of the ESR as part of the EU’s “Fit for 55” legislative package, the German government has set a revised cap for the national ETS that decreases yearly in accordance with reduction targets.

During the fixed-price period from 2021 to 2025, and as long as a price corridor is deemed necessary, the cap is flexible. If emissions (and therefore the demand for allowances) within the German ETS exceed the cap, additional allowances will be available for covered entities.

These flexibility provisions will become void as soon as price determination is left solely to the market. The cap will also be binding at this point.

Sectors and thresholds

TYPES OF FUELS COVERED: All fuels used in the transport sector, for the production of heat and other sectors such as fuels in agriculture, rail transport and waste incineration, e.g., fuel oil, LPG, natural gas, coal, gasoline, and diesel.

Biomass used as fuel in the transport sector and for heating purposes generally also falls under the scope of the system. However, emissions from biogenic fuels that meet the sustainability criteria as set out in national regulations transposing the “European Renewable Energy Directives 2029/28/EC” and “2018/2001” do not face compliance obligations.

The system started with a limited scope in 2021 and 2022, including fuel oil, LPG, natural gas, gasoline, and diesel. Coal was added in 2023. Fuels used in waste incineration were covered from 2024 onwards.

Provisions have been put in place to avoid double compliance burdens for installations covered by the EU ETS. Emissions that arise from a fuel delivered to and used in an EU ETS installation must be reported by the EU ETS installation in all cases. These emissions may then be deducted from the reported emissions of the fuel distributor under the German ETS if:

1. evidence can be provided that the emissions have been reported by the receiving EU ETS installation; and
2. no carbon price has been passed through.

If no such evidence can be provided or if carbon costs were passed through from the supplier under the system to the EU ETS installation, the supplier is obligated to report and surrender allowances to cover the emissions. In such a case, the EU ETS installation, upon application, receives full compensation for the price that has been passed through.

Point of regulation

Upstream

Type of entities

Entities releasing fuels for consumption (e.g., fuel distributors)

Number of entities

2,070 (2024)

Allowance Allocation & Revenue

Allowance allocation

PHASE 1:

Fixed price phase (2021 to 2025): Allowances are sold for a fixed price. The price schedule is as follows:

- 2021: EUR 25 (USD 27.06)
- 2022: EUR 30 (USD 32.47)
- 2023: EUR 30 (USD 32.47)
- 2024: EUR 45 (USD 48.71)
- 2025: EUR 55 (USD 59.53)

Generally, the yearly fixed price only applies to allowances acquired in the respective calendar year. However, up to 10% of allowances needed for compliance obligations for year X can be acquired until the end of September of year X+1 at the fixed price of year X.

Auctioning phase (from 2026): A price corridor with a minimum price of EUR 55 (USD 59.53) and a maximum price of EUR 65 (USD 70.35) per tCO_2 will apply in 2026.

CARBON LEAKAGE RULES: The German ETS is accompanied by a compensation mechanism to avoid carbon leakage for emission-intensive trade-exposed sectors. Regulations were released in July 2021 and applied retroactively to companies in emission-intensive sectors that face international competition. Industries eligible for compensation are those on the carbon leakage list of the EU ETS Phase 4. Therefore, firms from the same industrial sector regulated under the nETS and EU ETS should be treated equally.

Additional sectors/sub-sectors may qualify upon request if they meet thresholds for emissions and trade intensity. In contrast to the EU ETS, the German ETS does not use free allocation, but compensation based on sectoral fuel benchmarks and fixed compensation levels.

Auctioning share

100%

Total Revenue

EUR 12.97 billion (USD 14 billion) in 2024
2024

Use of Revenues

All revenues from the national ETS go into the Government's "Climate and Transformation Fund" (*Klima- und Transformationsfond*

– KTF). This fund is used to support measures under the climate protection program. These include GHG reduction programs – e.g., incentivizing climate-friendly transport and energy-efficient buildings – and direct assistance to industry or households.

Flexibility & Linking

Offset credits

The use of offset credits is not allowed.

Banking and borrowing

Banking is not allowed during the fixed price and the corridor phase.

Borrowing is not allowed.

Links with other Systems

The nETS is not linked with any other system.

Other carbon pricing instruments in the jurisdiction

ETS (supranational): EU ETS

Compliance

Compliance mechanism

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

Compliance Period

One calendar year. Entities have until the end of September to surrender allowances to cover the reported emissions of the previous year.

Monitoring, Reporting, Verification (MRV)

REPORTING FREQUENCY: Annual self-reporting in the form of an emissions report based on electronic templates to be submitted by the end of July.

From 2023 onwards, the emissions report must be based on a previously approved monitoring plan. Due to a high level of standardization of the permitted reporting methods during the first two years, the monitoring plan requirement was waived for 2021 and 2022.

Emissions data are recorded in a national registry and are publicly available.

VERIFICATION*:* Verification of the annual emissions by accredited independent third-party verifiers has been mandatory since 2023. As with the monitoring plan requirement, the verification requirement was waived for the years 2021 and 2022.

Penalties and enforcement

During the fixed-price phase, entities must pay an excess emissions penalty for each tCO_2 emitted for which no allowance has been surrendered, set at two times the fixed price. Payment of the penalty does not release the entity from the obligation to surrender allowances to cover the emissions; entities remain obliged to purchase and surrender the outstanding allowances.

For 2026, entities must pay an excess emissions penalty of EUR 100/tCO_2 (USD 108.24) for each tCO_2 emitted for which no allowance is surrendered.

For other instances of non-compliance, e.g., misreporting or late reporting, entities can be fined.

Market Regulation

Market Stability Provisions

FLEXIBLE CAP PROVISIONS

Instrument type: Quantity-based instrument

Functioning: To maintain the fixed price in the introduction phase, additional allowances exceeding the cap can be acquired by entities if the demand exceeds the cap. This was the case in 2021, where auctioned allowances exceeded the cap by 4.6 $MtCO_2$. In 2022, the auctioned volume was 4 $MtCO_2$ lower than the cap.

In 2026, auctions of allowances will contain a price corridor of a minimum price per tCO_2 of EUR 55 (USD 59.53) and a maximum price of EUR 65 (USD 70.35).

Market Design

MARKET PARTICIPATION: Trading accounts can be held by any domestic or international natural or legal person. Compliance entities can buy allowances directly from the trading platform or via financial intermediaries.

MARKET TYPES:

Primary: EEX is the German ETS's auction platform. During the fixed-price phase, allowances are issued at the predetermined price. Auctioning will start in 2026.

Secondary: Allowances can be purchased on the secondary market throughout the year.

LEGAL STATUS OF ALLOWANCES: Allowances do not have the status of financial instruments or derivates according to the "German Banking Act" or the "Securities Trading Act".

Other Information

Institutions involved

German Federal Ministry for Economic Affairs and Climate Action (BMWK): Responsible for establishing the regulatory framework of the national ETS.

German Emissions Trading Authority (DEHSt) at the German Environment Agency (UBA): Implementing authority, e.g., responsible for the registry and receiving emission reports.

Regulatory Framework

Fuel Emissions Trading Act

Emissions Reporting Regulation 2022

Fuel Emissions Trading Regulation

Carbon Leakage Regulation

Evaluation / ETS review

The German government published its first evaluation report in December 2022.*

A second evaluation report has been published in January 2025.** From 2025 onwards, the German ETS will be evaluated every four years.

* The 2022 report is available (German only) at https://dserver.bundestag.de/btd/20/048/2004861.pdf.

** The 2024 report is available (German only) at https://dserver.bundestag.de/btd/20/144/2014488.pdf.

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