German National Emissions Trading System

General Information

ETS Description
Germany launched its National Emissions Trading System (in German: Nationales Emissionshandelssystem, or nEHS) for heating and transport fuels in 2021. This measure complements the EU ETS and forms part of the ‘Climate Action Programme 2030,’ a package of measures adopted by the German Federal Cabinet to reach Germany’s 2030 climate targets and aim for climate neutrality by 2050. Because GHG emissions from the country’s energy, industry, and domestic aviation sectors are already covered by the EU ETS, the introduction of the national ETS leads to most major sectors in Germany facing a CO2 price from 2021 onwards.

After the release of the ‘Cornerstones for the Design of a National ETS’ in October 2019, the implementing legislation for the nEHS—the ‘Fuel Emissions Trading Act’—was adopted in December 2019 and amended in November 2020.

The national ETS will be phased in gradually, with a fixed price per tCO2 from 2021 to 2025. In 2026, auctions with minimum and maximum prices will be introduced. Whether a price corridor will be applied from 2027 onwards has to be decided in 2025. The coverage of fuels will also be gradually expanded.

ETS Status
in force

Jurisdictions
Germany

Year in Review
In 2021, the nEHS started operating. Regulated entities had to open a nEHS registry compliance account and start monitoring their emissions. Regulated entities and intermediaries opened trading accounts at the EEX exchange. The sale of nEHS allowances (nEZ) started in October 2021.

In July 2021, a “Carbon Leakage Regulation” was adopted that aims to ensure cross-border competitiveness of firms regulated under the nEHS.

The next steps in the implementation of the nEHS include amending the “Fuel Emissions Trading Regulation” by determining the annual cap of the nEHS and introducing hardship provisions. A first draft was published in October 2021.

Sectoral coverage
Transport
Buildings

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)
GHG reduction targets

**BY 2030:** 65% below 1990 GHG levels (Climate Change Act)

**BY 2050:** GHG neutrality (Climate Change Act)

Current Allowance Price (per t/CO2e)
EUR 30 (USD 35.48)

### Size & Phases

**Covered emissions (2021)**

40.00%

**GHGs covered**

CO2 only

**Phases**

**PHASE ONE:** 10 years (2021-2030)

**Cap**

**PHASE ONE (2021-2030):** The nEHS cap starts at 301 MtCO₂ in 2021 and decreases to 233 MtCO₂e in 2030.

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). 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 nEHS exceed the cap, additional allowances will be available for compliance entities. Such additional allowances will be covered by using the flexibility mechanisms provided for in the ESR, including transfer of additional emission reductions in sectors not covered by the EU ETS, and/or by acquiring annual emission allocations from other EU Member States.

As soon as the price determination is left to the market solely, the cap will be binding without using the aforementioned flexibility provisions.

**Sectors and thresholds**

The nEHS covers all fuel distributors and suppliers. It applies to all fuels used in the transport sector and for the production of heat, 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 nEHS. 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 starts with a limited scope in 2021 and 2022, including fuel oil, LPG, natural gas, gasoline, and diesel. Other fuels such as coal will be covered from 2023 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 have to be reported by the EU ETS installation in any case. These emissions may be deducted from the reported emissions of the fuel distributor under the nEHS if: (a) evidence can be provided that the emissions have been reported by the receiving EU ETS installation; and (b) no CO₂ price has been passed through. If such evidence cannot be provided and if CO₂ costs were passed through from the supplier under the nEHS to the EU ETS installation, the supplier is obligated to report and to surrender allowances to cover the emissions. In that case, the EU ETS installation receives a full compensation for the nEHS price that has been passed through.

**Point of regulation**

Upstream

**Number of entities**
Allowance Allocation & Revenue

Allowance allocation

PHASE ONE (2021-2030):

Fixed price phase (2021-2025): Allowances will be sold for an annually increasing fixed price:

- 2021: EUR 25 (USD 29.57)
- 2022: EUR 30 (USD 35.48)
- 2023: EUR 35 (USD 41.40)
- 2024: EUR 45 (USD 53.22)
- 2025: EUR 55 (USD 65.05)

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): Auctioning of allowances starts in 2026, and a price corridor with a minimum price of EUR 55 (USD 65.05) and a maximum price of EUR 65 (USD 76.88) per tCO₂ will apply in this year.

CARBON LEAKAGE RULES: The nEHS is accompanied with a compensation mechanism to avoid carbon leakage for emissions-intensive trade-exposed sectors. Respective regulations were released in July 2021 and will have retroactive effect. The carbon leakage rules apply to companies from 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 nEHS and EU ETS should be treated equally.

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

Total Revenue

7.2 billion (USD 8.5 billion)

Use of Revenues

Revenues will be partly used to support measures under the climate protection program such as incentivizing climate-friendly transport and energy-efficient buildings, and partly redistributed to consumers, e.g., as a way to re-finance renewable energy subsidies and reduce the “Renewable Energy Surcharge” on electricity.

Flexibility & Linking

Offsets and credits

No offsets are allowed in Phase One.

Banking and borrowing

Banking is not allowed during the fixed price phase but will be allowed in the auctioning phase.

Links with other Systems

The long-term goal is to transfer the nEHS to the EU ETS for buildings and road transport proposed by the EU Commission in July 2021 (see the “EU ETS for buildings and road transport” factsheet for more).

Compliance
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 has been waived for 2021 and 2022.

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

VERIFICATION: Verification of the annual emissions by accredited independent third-party verifiers is mandatory from 2023 onwards. Analogously to the monitoring plan requirement, the verification requirement has been waived for the years 2021 and 2022.

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 doesn't release the entity from the obligation to surrender allowances to cover the emissions; entities remain obliged to purchase and surrender the outstanding allowances.

After the fixed-price phase, entities must pay an excess emissions penalty of EUR 100/tCO$_2$ (USD 118.27) for each tCO$_2$ emitted for which no allowance was surrendered. This amount will increase annually in line with the European consumer price index.

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

Compliance Period

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

Market Regulation

Market Stability Provisions

Additional allowances exceeding the cap can be acquired by entities in the fixed-price phase.

In 2026, auctions of allowances will contain a price corridor of a minimum price per tCO$_2$ of EUR 55 (USD 65.05) and a maximum price of EUR 65 (USD 76.88).

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 nEHS’s auction platform. During the fixed-price phase, allowances are issued at the predetermined price. Auctioning will only start in 2026.

Secondary: EEX will likely decide on the implementation and possible design of a secondary market in the course of 2022.

LEGAL STATUS OF ALLOWANCES: Allowances do not have the status of financial instruments or derivates according to neither the German Banking Act nor the Securities Trading Act.

Other Information

Institutions involved

German Federal Ministry for Economic Affairs and Climate Action (BMWK)
German Emissions Trading Authority (DEHSt) at the German Environment Agency (UBA)

Regulatory Framework
**Evaluation / ETS review**

The German government will publish evaluation reports on the functioning and implementation of the German national ETS every two years until 2024 (until end of November 2022 and 2024) and every four years from 2024 onwards.

**Disclaimer**

Copyright © 2022 by International Carbon Action Partnership (ICAP). All rights reserved. The content provided by the ICAP ETS map is protected by copyright. You are authorized to view, download, print and distribute the copyrighted content from this website subject to the following condition: Any reproduction, in full or in part, must credit the International Carbon Action Partnership (ICAP) must include a copyright notice. If you have any questions please contact infoicapcarbonaction[dot]com.

In line with ICAP’s mandate, the ICAP ETS map exclusively covers cap-and-trade systems for greenhouse gas emissions. Information displayed on the map is regularly updated by ICAP Secretariat staff based on official and public information as far as possible and subject to annual peer review by government representatives from the covered systems. Although the information contained in the map is assembled with utmost care, ICAP cannot be held liable for the timeliness, correctness and completeness of the information provided. Please refer to the imprint on the website of the International Carbon Action Partnership regarding links to external websites, liability and privacy policy.