International Carbon Action Partnership

EU Emissions Trading System for buildings and road transport ("EU ETS 2")

General Information

ETS Description

In July 2021, the European Commission proposed the “Fit for 55” package of reforms to align EU climate and energy policy with the objectives of the “European Green Deal”, most importantly the ambitious 2030 climate target of reducing net emissions to at least 55% below the 1990 level. The package included important amendments to the EU ETS framework, including a proposal to extend emissions trading to new sectors.

A new, separate emissions trading system (ETS 2) will be established for emissions from fuels used for combustion in buildings, road transport and additional sectors (mainly small industry not covered by the existing EU ETS). The ETS 2 will complement other policies of the European Green Deal in the covered sectors, helping Member States achieve their emission reduction targets under the “Effort Sharing Regulation” (Regulation (EU) 2018/842).

The ETS 2 is based on the ‘cap-and-trade’ principle. It will cover emissions upstream, meaning the obligation to surrender allowances will fall on the fuel suppliers rather than end-consumers. The ETS 2 cap will be set to bring emissions down by 42% by 2030 compared to 2005 level.

The ETS 2 is due to become fully operational in 2027 (but may be delayed until 2028 in the event of exceptionally high energy prices). As a first step, the monitoring and reporting of emissions from the covered sectors starts in 2025.

Allowances in the ETS 2 will be distributed exclusively via auctioning. In 2027, an additional auction volume will be front-loaded to ensure a smooth start of the system. The ETS 2 will also operate with a dedicated, rule-based market stability reserve to mitigate insufficient or excessive supply of allowances to the market.

The ETS 2 also has an opt-in option, allowing Member States to unilaterally extend the system to sectors not covered by the Directive in their jurisdiction (such as fuel use in agriculture and forestry) with the Commission's approval. In 2024, the Commission adopted delegated acts to approve individual requests for extension.

A share of revenues from the ETS 2 will be used to support vulnerable households and micro-enterprises through a dedicated Social Climate Fund, created as part of the “Fit for 55” package. Member States will be required to use the remaining ETS 2 revenues for climate action and social measures.

The full transposition of the provisions for the new system into EU Member States' law was required for mid-2024. As several countries have yet to finalize the transposition, the Commission is actively collaborating with Member States to support and ensure completion of this process.

ETS Status

under development

Jurisdictions

Austria
Belgium
Bulgaria

Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Italy
Latvia
Liechtenstein
Lithuania
Luxembourg
Malta
Netherlands
Norway
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden

Sectoral coverage

Transport
Buildings

Revenue usage

Climate mitigation
Assistance for individuals, households, and businesses

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)

3,374.7 $MtCO_2e$ (2022)*

* National emissions for the EU-27 reported to the UNFCCC and to the EU in April 2024 under the “EU Governance Regulation”.

GHG reduction targets

By 2030: Reduce net emissions to at least 55% below 1990 levels (European Climate Law)

By 2050: Climate neutrality (European Climate Law)

Size & Phases

GHGs covered

CO2

Sectors and thresholds

The EU ETS 2 covers the emissions from the consumption of fuels used for combustion in the road transport and buildings sectors, as well as in small industries. This essentially concerns the following fossil fuel sources: petrol, gasoil (diesel), heating oil, natural gas, liquefied gas, coal.

Point of regulation

Upstream

Type of entities

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

Allowance Allocation & Revenue

Allowance allocation

Allowances in the ETS 2 will only be auctioned. A share of ETS 2 allowances will be allocated to and auctioned for the Social Climate Fund. All remaining ETS 2 allowances will be distributed among Member States to be auctioned, based on the average distribution of emissions in the covered sectors over 2016 to 2018.

Use of Revenues

The Social Climate Fund was created alongside the ETS 2 to help EU Member States in financing structural measures and investments in energy efficiency and renovation of buildings, clean heating and cooling and integration of renewable energy, as well as in zero- and low-emission mobility solutions. Member States will also have the option of spending part of the resources on temporary direct income support.

All measures and investments will be compiled in national Social Climate Plans. The Fund will pool resources from the auctioning of allowances in the ETS 2 as well as of 50 million allowances from the EU ETS. Together with a mandatory 25% contribution of the Member States to their Social Climate Plans, the Fund should mobilize at least EUR 86.7 billion (USD 93.8 billion) between 2026 and 2032.

Member States will be required to use their remaining ETS 2 revenues for climate and social purposes.

Flexibility & Linking

Other carbon pricing instruments in the jurisdiction

ETS: European Union Emissions Trading System (EU ETS)

Fuel ETS (national): in Austria and Germany, to be replaced by the EU ETS 2 from 2027 onward.

Carbon tax (national): in Denmark, Estonia, Finland, France, Hungary, Latvia, Netherlands, Norway, Poland, Slovenia, Spain, and Sweden.

Compliance

Compliance mechanism

Covered entities must surrender one allowance per tonne of CO_2 emitted for all their verified emissions in a compliance period.

Compliance Period

One year. Deadline for surrendering allowances: end of May every year from 2028.

Monitoring, Reporting, Verification (MRV)

MONITORING: Starts in 2025. The monitoring approach is to use scope factors to distinguish final consumption sectors* and emission factors for fuel types.

REPORTING: Starts in 2025. By the end of April 2025, covered entities must submit their first emission reports for the historical emissions in 2024. From 2026, covered entities will report verified emissions.

VERIFICATION: Verification of emission reports by an independent accredited verifier is required from 2026 (for 2025 emissions).

* To exclude activities that do not fall under the scope of the system, such as agricultural use of fuel.

Penalties and enforcement

Regulated entities must pay an excess emissions penalty of EUR 100 (USD 108.24), adjusted for inflation, for each tCO_2 emitted for which no allowance has been surrendered, in addition to buying and surrendering the equivalent number of allowances. The name of the non-compliant regulated entity is also made public. Member States may enforce different penalties for other forms of non-compliance.

Market Regulation

Market Stability Provisions

ETS 2 MARKET STABILITY RESERVE (MSR)

Instrument type: Quantity-based instrument

Over the course of 2027, a 30% higher volume of allowances will be auctioned to provide market liquidity. The ETS 2 will operate with a dedicated, rule-based MSR to mitigate insufficient or excessive supply of allowances to the market, and with measures in the event of an excessive price increase.

Functioning: The reserve will be initially endowed with 600 million allowances. During the first three years the ETS 2 is operational, if the price of allowances exceeds EUR 45 (USD 48.7) (in 2020 prices, i.e. adjusted for inflation), additional allowances may be released from the MSR to address excessive price increases. Allowances may also be released from this reserve if the price of allowances increases too rapidly, according to specific rules and conditions.

Other Information

Institutions involved

European Commission: Responsible for establishing the regulatory framework of the EU ETS and centralized administration of the system, e.g., the EU registry.

Competent authorities of all EU Member States as well as Iceland, Liechtenstein, and Norway: implementation, e.g., verifying compliance with MRV and surrender obligations.

Regulatory Framework

Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union

Regulation (EU) 2023/955 of the European Parliament and of the Council establishing a Social Climate Fund and amending Regulation (EU) 2021/1060

All other legislation and documentation can be found here.

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