German Environment Agency

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Introduction of an emissions trading system for buildings and road transport in the EU

Key aspects of the EU Commission's proposal of 14/07/2021

On 14/07/2021, the European Commission presented a series of legislative proposals as part of the 'Fit for 55' package, which is intended to align the EU's energy and climate policy instruments with the new climate target of reducing emissions by 55% compared to 1990 levels by 2030.[1] This factsheet presents the key aspects of the EU Commission's proposals[2] for the new emissions trading system for buildings and road transport. Other factsheets provide information on the cap and the market stability reserve (MSR) in the existing EU emissions trading system (EU ETS), the ETS for maritime transport and aviation and the new carbon border adjustment mechanism (CBAM). In addition to these proposals, the 'Fit for 55' package also contains other proposals that will contribute to achieving the climate target. These include, for example, more ambitious targets for energy efficiency and renewable energies and the reform of the Energy Taxation Directive.

The most important elements at a glance

- A separate emissions trading system (EU ETS 2) should be created within the scope of the Effort Sharing Regulation (ESR) for fossil fuel consumption in the buildings and road transport sector. Emissions trading should start after a two-year implementation phase in 2026.
- The EU ETS 2 cap should be set in line with the new ESR emission reduction target. A 'frontloading' mechanism (increasing the total number of certificates by 30% in 2026) should enable a 'smoother' entry. From 2026 onwards, the number of emission allowances should decrease linearly by 5.15% of the reference quantity annually and from 2028 onwards by 5.43%. The total reduction in 2030 should be 43% compared to 2005.
- The allocation of emission allowances should be carried out entirely through auctions based on the cap determined by the EU Commission.
- In contrast to the German national emissions trading system (nEHS), the EU ETS 2 does not stipulate fixed prices or a price corridor. Imbalances between supply and demand should be mitigated via a (MSR).
- €72 billion (about 25%) of the auctioning revenues should be used for the newly created Climate Social Fund to be managed by the EU. Revenues from auctioning another 150 million emission allowances are earmarked for the existing EU Innovation Fund, which is already fed by the existing EU ETS (EU ETS 1). The remaining revenues go to the Member States and should be used for climate or socially relevant spending purposes, especially in the buildings or road transport sectors.

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0550
[2] Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757: https://ec.europa.eu/info/sites/default/files/revision-eu-ets_with-annex_en_0.pdf; Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a Social Climate Fund: https://ec.europa.eu/info/sites/default/files/social-climate-fund_with-annex_en.pdf

1 Key elements of the proposed emissions trading system

1.1 Objective

Net greenhouse gas emissions in the EU must be **reduced** by **at least 55%** compared to **1990** levels by **2030**. The current instruments and measures, however, are not sufficient to achieve this new European emissions reduction target. This is especially true for the sectors under the Effort Sharing Regulation (ESR). For these sectors outside the EU ETS 1, the reduction target should therefore be increased from 29% to 40% compared to 2005. The introduction of a separate European emissions trading system for the buildings and road transport sectors (EU ETS 2) is intended to create stronger economic incentives to reduce emissions and to ensure that the targeted emissions reduction is actually achieved in these sectors. Specifically, greenhouse gas emissions in the **buildings and road transport** sectors should be reduced by **43%** by **2030** compared to **2005** (Legislative Financial Statement of the proposed directive[3], p. 72).

The overarching national sectoral targets of the ESR are maintained at the same time (Explanatory Memorandum of the proposed Directive, p. 4).

1.2 Operating principle

The EU ETS 2 should be launched in 2026 after a two-year preparatory phase. The EU ETS 2 will be organised as a **cap-and-trade mechanism** analogous to the existing EU ETS 1. An annual cap decreasing over time will be established for the total CO_2 emissions from the buildings and road transport sectors (Chapter IVa, Article 30c of the proposed directive).

The emission allowances will be auctioned in accordance with the cap. Auctioning of allowances will take place from 2026 onwards. Unlike in EU ETS 1, there will be **no free allocation** of allowances in the EU ETS 2. The distributors of fossil fuels must purchase and surrender allowances for the emissions caused in the two sectors. There is no provision for free allocation of allowances (Chapter IVa, Article 30d of the proposed directive) because the distributors can pass on their costs to the end users. The increased prices for end users create incentives to save fuel and use low-emission technologies so that the demand for fossil fuels and thus greenhouse gas emissions will decrease.

1.3 Scope

The EU ETS 2 should only cover **combustion-related CO_2 emissions in the buildings and road transport sectors** (Annex III of the proposed directive, p. 91). Emissions from fuel consumption in agriculture and forestry, the use of machinery outside road transport, non-electrified trains and small businesses in the energy and industry sectors not subject to the EU ETS 1 will not be included.

A coupling of both systems (EU ETS 1 and EU ETS 2) will be considered in the future but is not envisaged before 2030. Specifically, the Commission intends to assess by 31/10/2031 whether an integration of the EU ETS 2 into the EU ETS 1 should be pursued (Chapter IVa, Article 30i of the proposed directive).

[3] https://ec.europa.eu/info/sites/default/files/revision-eu-ets_with-annex_en_0.pdf

1.4 Point of regulation

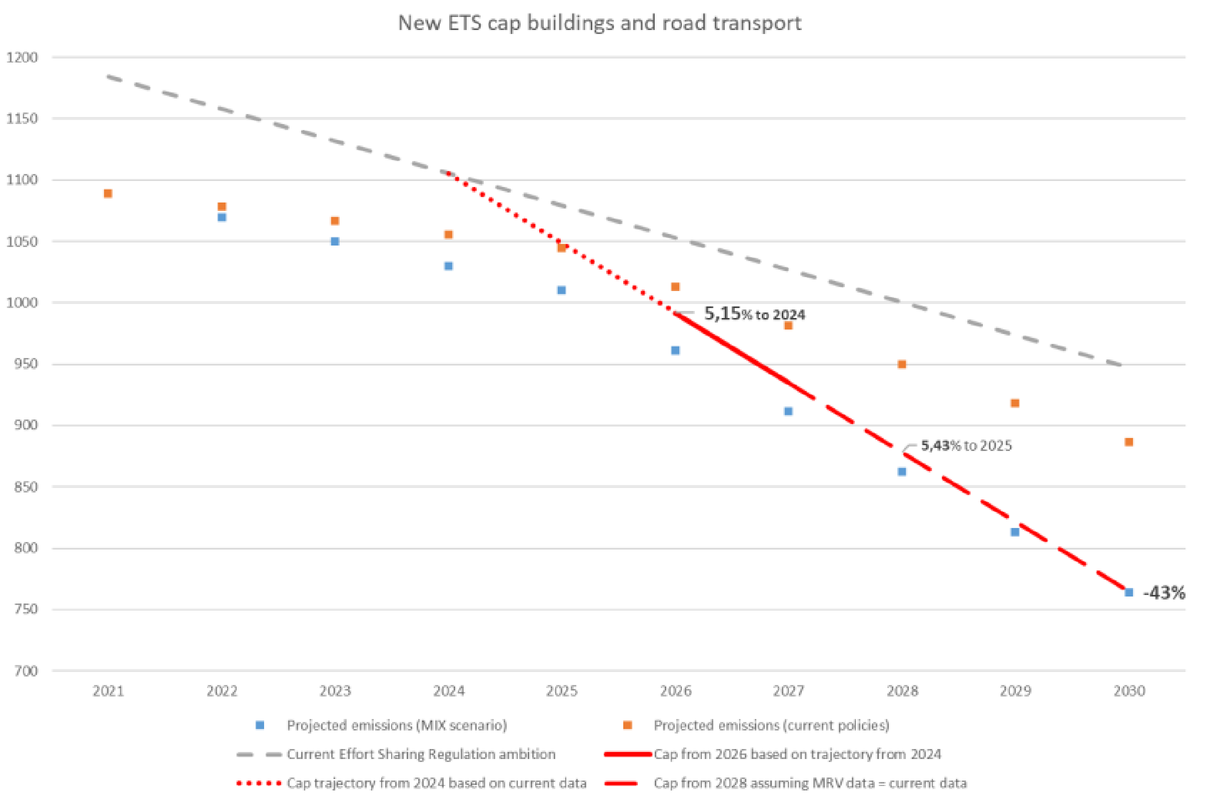
Regulated entities are the **distributors of motor and heating fuels** (upstream approach). A downstream approach, as applied in the EU ETS 1, would be difficult and inefficient due to the very large number of small emitters in the buildings and road transport sectors.

Tax warehouses for oil (approx. 7,000 tax warehouses across the EU) and fuel suppliers (approx. 1,400 regional and local gas suppliers across the EU, approx. 3,000 coal suppliers across the EU) will be subject to the ETS obligations. In total, the Commission expects that approx. **11,400 distributors** across the EU will be regulated under the EU ETS 2 (Impact Assessment Report 1/4 of the proposed Directive, p. 57).

1.5 Cap

The EU Commission will announce the total number of allowances for 2026 by 01/01/2024 (Chapter IVa., Article 30c(1) of the proposed directive). A mechanism called '**frontloading**' is planned for the start of the EU ETS 2. The **total number** of allowances in **2026** will therefore be **30% higher** than initially planned for 2026 to enable a 'smoother' start. The total quantity will be reduced accordingly between 2028 and 2030. This mechanism should ensure that stakeholders can also acquire allowances at an early stage for later years (Impact Assessment Report 2/4 of the proposed directive, p. 95). From 2026 onwards, the number of allowances should annually decrease linearly by **5.15%** of the reference amount[4] (linear reduction factor, reference year 2024).

Figure 1 **New EU ETS 2 cap for buildings and road transport**



Source: Impact Assessment Report 2/4 of the proposed directive, p. 94.

[4] The reference amount should be determined for the covered sectors based on the reference emissions according to the ESR.

As indicated in Figure 1, it is envisaged that the **linear reduction factor** will increase to **5.43%** (applies conditionally) per year from 2028 (reference year 2025). This should ensure that the cap is in line with the climate protection targets (red line in Figure 1).

1.6 Market stabilisation

According to an estimate by the EU Commission, the proposed amount of emission allowances in circulation regulated by the cap and the MSR will probably result in a price level of between **48€/t CO_2 and 80€/t CO_2** in 2030. The price level depends in particular on the impact of further climate protection measures within the framework of the 'Fit for 55' package in the buildings and road transport sectors. In principle, the more effective further measures are, the lower the price becomes (Impact Assessment Report 2/4 of the proposed directive p. 339).

In contrast to the national fuel emissions trading system in Germany, the EU ETS 2 does not envisage fixed prices or a price corridor for the auctions. Stronger imbalances between supply and demand should be mitigated via a MSR as in EU ETS 1.

Functioning of the MSR

600 million emission allowances will be added to a newly created, separate section of the MSR existing within the EU ETS 1 in 2026 (Chapter IVa, Article 30d(2); Chapter IVa, Article 1a of the proposed directive). This is intended to control the number of allowances:

- If the total number of allowances in circulation as an indicator of the market surplus is **greater than 440 million**, 100 million allowances should flow into the MSR from the planned auction budget within one year (Chapter IVa, Article 1a of the proposed directive).

- If the total number of allowances in circulation is **less than 210 million**, 100 million allowances will be released to the market from the MSR. If less than 100 million allowances remain in the MSR, the remaining balance will be fully allocated to the market (Chapter IVa, Article 1a of the proposed directive).

If the average allowance price in three consecutive months exceeds **the average price** of the preceding six months **by more than 100% or 200%** (calculated from the beginning of the three-month period), the EU Commission should immediately release **50 million or 150 million additional allowances** respectively from the MSR into the market. These should be auctioned regularly within three months of the announcement of the decision (Chapter IVa, Article 30h(1); Chapter IVa, Article 1a of the proposed directive).

1.7 Monitoring, reporting, verification

In principle, monitoring, reporting and verification in EU ETS 2 should be linked to the EU ETS 1 mechanisms (Chapter IVa, Article 30f of the proposed directive).

- The **reporting obligation** applies to the 2024 emissions **for the first time**, which must be reported by **30/03/2025**.

- **From 2026 onwards,** the emissions from the previous year should be reported in accordance with the monitoring and reporting requirements listed in Article 14(1) (Chapter IVa, Article 30f(2) of the proposed directive). The proposal envisages that the 'compliance cycle' (recurring steps of monitoring planning, validation, monitoring and reporting, verification, surrender of emission allowances and enforcement of the reporting and surrender obligation) should run parallel to those in the EU ETS 1 and that companies should accordingly report on **previous year's emissions** by **31 March of each year** at the latest and surrender the relevant allowances by 30 April of each year. The surrender obligations should apply in 2027 for the first time for the 2026 emissions (Impact Assessment Report 1/4 of the proposed directive, p. 58).

Member States should ensure that distributors are able to record and document reliably and accurately the quantities of fuels used in the covered buildings and road transport sectors. Member States should also take appropriate measures to avoid double counting of emissions. Fuels used in the EU ETS 1 sectors (Directive 2003/87/EC) should not be double-counted in the EU ETS 2 (Chapter IVa, Article 30f(4) of the proposed directive). The necessary regulations should be adopted in accordance with the EU Monitoring Regulation (Article 14(1) of the proposed directive).

1.8 Use of revenues

The revenues from the EU ETS 2 should be used proportionately for a newly created Social Climate Fund (SCF) and the existing Innovation Fund. Remaining revenues will remain with the Member States:

- A **Social Climate Fund** managed by the EU Commission should be created one year before introducing the EU ETS 2 to enable immediate social support. This will be financed from the EU budget's own resources. The Member States should make these revenues available to the EU budget as own resources (Social Climate Fund Proposal[5]: Budgetary Implication). **€72.2 billion** should be provided to the Member States via the Social Climate Fund between **2025 and 2032** (about 25% of the expected revenues). The fund is intended to promote the implementation of national social climate plans. Country-specific upper limits determine the maximum amount of funds that Member States can withdraw. The distribution of funds among Member States is based on certain factors such as CO_2 emissions per household, number of people at risk of energy poverty, population size, GDP per inhabitant (Social Climate Fund Proposal: Annex I). The funds withdrawn should be doubled by the Member States so that the actual funds available would rise to a total of **€144.4 billion**. Eligible measures within the social climate plans include direct payments to low-income households that are particularly affected by the burdens in the buildings and road transport sectors, and measures and investments that financially support low-income households, small businesses and particularly affected mobility users when switching from fossil to climate-friendly technologies (Social Climate Fund Proposal: Article 6).

- In addition, revenues from **150 million emission allowances** are earmarked for the existing EU **Innovation Fund**. This should be used to finance important investments, especially for the decarbonisation of buildings and the expansion of the charging infrastructure (Chapter IVa, Article 30d(3) of the proposed directive).

  The **remaining revenues** should remain with the **Member States**. The distribution should be based on reference emission values of the ESR (average emissions of the buildings and road transport sectors of the individual Member States for 2016-2018) (Chapter IVa, Article

[5] https://ec.europa.eu/info/sites/default/files/social-climate-fund_with-annex_en.pdf

30d(4) of the proposed directive). The Member States should use the revenues and those revenues that will be available through the Social Climate Fund for one or more of the **climate and/or socially relevant expenditure purposes** mentioned in Article 10(3), in particular in the buildings or road transport sectors. These can be, for example, measures that reduce the energy demand of buildings or support a modal shift to public transport (Chapter IVa, Article 30d(5a+b) of the proposed directive).

2 Differences to national fuel emissions trading

The scope of the EU ETS 2 is narrower than that of the national fuel emissions trading system in Germany. Only **fuel consumption in the buildings and road transport sectors** should be covered, not all fuel consumption outside the ETS 1 as in Germany. In addition, **no fixed price phase** is planned in the EU ETS 2 – prices are determined on the market from the beginning. The **compliance cycle** of the EU ETS 2 is also linked to the existing EU ETS 1, fuel emissions trading in Germany follows a different rhythm here.

3 Next steps and key issues for the political process

The next step is for the Commission's proposal to be analysed by the EU Parliament and the Member States in the European Council. Both institutions can propose amendments which are then discussed and negotiated by the Commission, the EU Parliament and the European Council. The result of the negotiations will finally be formally decided in the Parliament and the Council. To be able to start the preparatory phase of EU ETS 2 in 2024 as planned, implementation into national law would be required by 31/12/2023.

Key issues and aspects for the political process:

- **Scope**: EU ETS 2 is limited under the proposal to the buildings and road transport sectors. It remains to be seen exactly how this scope will be defined. Without including all fossil fuels, insofar as they are not yet covered by EU ETS 1, the question arises as to how an existing unequal treatment caused, for example to small industries that pay a CO_2 price under ETS 1 while competing businesses outside the scope of ETS 1 are not subject to a comparable measure, can be counteracted.
- **Price expectations:** How do market participants behave and how do they influence price formation? Are the intended mechanisms appropriate for price cushioning?
- **Use of revenues, distributional effects and acceptance:** The Commission envisages that the revenues will be used for climate and socially relevant measures. However, a concrete pattern of the redistribution of revenues to private households has a direct influence on the measure's acceptance. This certainly requires a Member State-specific analysis of the cost burdens, especially taking into account the interaction with the Energy Taxation Directive. The question of revenue distribution within the Member States will also become an issue.
- **Transition from the German national emissions trading system (nEHS) to EU ETS 2:** A large part of the emissions covered by the nEHS in Germany will be regulated in EU ETS 2. This raises the question as to how a transition from the nEHS to EU ETS 2 can succeed.

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