Umwelt Bundesamt

German Environment Agency

As of 12. November 2021

Aligning the EU ETS and the Market Stability Reserve with the new EU climate change target for 2030

Central 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 to align energy and climate policy instruments with the new climate target for 2030 of reducing emissions by at least 55% compared to 1990 levels.[1] This fact sheet outlines key aspects of the proposal for the European Emissions Trading System (EU ETS) and the Market Stability Reserve (MSR).[2] Other fact sheets provide information on maritime transport, aviation, the proposed Carbon Border Adjustment Mechanism and the creation of a new emissions trading system for buildings and road transport. The 'Fit for 55' package also contains other proposals that contribute to reducing emissions in ETS sectors. These include the Energy Tax Directive with more ambitious targets for energy efficiency and renewable energies.

The most important elements of the reform proposal at a glance

- The **climate ambition** for the EU ETS is to be increased. By 2030, emissions (incl. maritime transport and aviation) are to be reduced by 61% compared to 2005 levels. This target is to be achieved through a 4.2% linear reduction factor (LRF) and a reduction of the cap in the year after the amendment enters into force (equal to a reduction 117 million allowances in 2024 if it enters into force in 2023).
- The **scope** of the EU ETS is to be extended to maritime transport. This will increase the cap by 79 million t CO_2e. A surrender obligation for 100% of emissions will apply to maritime transport after the end of an introductory phase from 2026 onwards.
- The system of **free allocation** for industry is to remain in principle. Free allocation for sectors covered by the new carbon border adjustment mechanism is to be gradually reduced from 2026 to zero in 2035.
- No free allocation is to be granted to **maritime transport**, instead all allowances shall be auctioned. The **free allocation for aircraft operators** is to expire at the end of 2026.
- The architecture of the **Market Stability Reserve (MSR)** is to be fundamentally unchanged. The doubled intake rate of 24% is to be extended beyond 2023 up to 2030. A special rule is proposed with a view to avoiding threshold effects when allowances are fed into the reserve. The amount of allowances in the MSR is to be limited to 400 million and aviation and maritime transport are to be included in the calculation of the total number of allowances in circulation (TNAC).
- **Innovation and Modernisation Funds** are to be increased, opened to other projects and countries and the allocation rules adjusted. In addition, Member States should invest 100% of the **auction proceeds** in climate protection measures and in supporting low-income households (previously 50%).
- The Commission aims at a **rapid implementation** of the proposals from as early as 2024.

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[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0550

[2] https://ec.europa.eu/info/sites/default/files/revision-eu-ets_with-annex_en_0.pdf, https://ec.europa.eu/info/sites/default/files/revision-market-stability-reserve_with-annex_en.pdf and https://ec.europa.eu/info/sites/default/files/revision_of_the_eu_emission_trading_system_for_aviation.pdf

1 Key elements of the EU ETS and MSR reform proposals

1.1 Extended scope

The scope of the EU ETS is to be extended to maritime transport. Emissions from journeys within the European Economic Area (EEA, i.e. EU, Norway, Iceland and Liechtenstein) and emissions at berth are to be fully covered. Emissions from journeys arriving in the EU from abroad or departing from the EU are to be covered at 50%. The obligation to surrender allowances in this sector is to be introduced gradually from 2023 to 2025, with the full surrender obligation applying from 2026 (see also Fact Sheet 'Maritime Transport').

According to the Commission's proposal, the scope for stationary installations and aviation remains essentially unchanged. An adjustment of the minimum installation size in some sectors is intended to prevent installations from falling below the current thresholds and thus out of the ETS when implementing emission reduction measures. For aviation, the EU ETS will continue to apply only to flights within the European Economic Area and to Switzerland and the United Kingdom.[3] The CORSIA system developed by the International Civil Aviation Organisation (ICAO) will then be applied to flights to and from third countries (see also Fact Sheet 'Aviation').

From 2026, a separate EU-wide fuel emissions trading system is to be introduced, covering the buildings and road transport sectors (see also Fact Sheet 'ETS-2'). There are no plans at present to link the two emissions trading systems.

1.2 Tightened cap

Cap architecture in the EU ETS
The available number of emission allowances in the EU ETS is limited by the cap, which specifies the required reductions in the sectors covered by the EU ETS. There is a cap for stationary installations (to include shipping in the future) and a cap for aviation. The trajectory of the cap is determined by a linear reduction factor (LRF), which reduces the cap by a certain number of allowances each year.[4] In addition to an increase in the LRF from a current 2.2% to 4.2%, a one-off reduction is planned to bring the cap onto a linear path starting in 2021, even if the stricter LRF will be applied at a later date.

According to the EU Commission's proposal, emissions from maritime transport will be regulated under one cap together with emissions from the stationary sector. As before, a separate cap will be calculated for aviation. However, certificates can be freely traded and exchanged between these sectors.

The EU Commission's proposal would lead to a cap reduction of 62% in the stationary sector compared to emissions in 2005 (currently: minus 43%). The LRF is to be increased to 4.2% to achieve this additional emissions reduction which corresponds to a constant annual cap reduction of 82 million allowances.

Furthermore, a one-off cap reduction is intended to ensure that the cap is brought onto a reduction path that corresponds to an LRF of 4.2%, applied from as early as 2021. If the amended directive enters into force in 2023, the one-off cap reduction in the stationary sector would correspond to 117 million allowances for 2024.

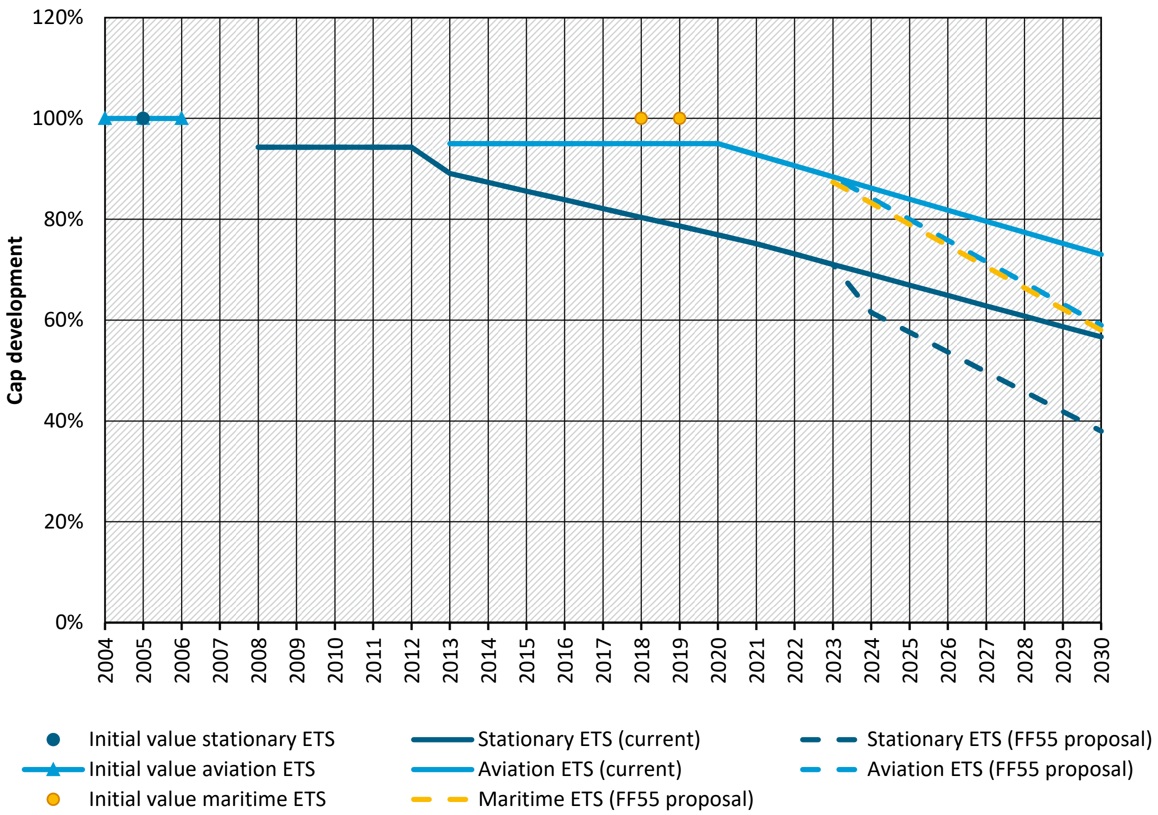
[3] Flights from Switzerland and the UK into the EEA are included in the emissions trading schemes of the two countries.

[4] For stationary installations, the LRF refers to the mean value of the cap between 2008 and 2012.

The LRF for maritime transport is based on 2018 – 2019 average emissions. The inclusion of maritime transport increases the cap by 79 million t CO_2e in the year after the amendment enters into force (about 6% of the stationary sector cap in 2024).

No one-off cap reduction is envisaged for aviation. Instead, according to the Commission's proposal, the currently applied LRF of 2.2% is to remain unchanged up to 2023 and then be raised to 4.2%. Figure 1 shows the trajectories of various caps up to 2030.

Figure 1 Cap trajectory in the EU ETS (in % of the respective base year)



Notes: The figure assumes that the proposals will be implemented by 2024. The graphs have been corrected for the changed scopes of the stationary EU ETS and Brexit. The 2005 and 2012-2020 aviation figures have been calculated retrospectively based on the scope in and after 2021. A part of the flights to overseas territories will be added from 2024. It has also been assumed that in aviation, the LRF during the years 2021 to 2023 applies to the 2020 allocation and, after 2024, to the 2023 allocation. In maritime transport, the LRF has been applied to the 2018 and 2019 average emissions from 2021 onwards.
Source: Authors' illustration based on the EU Commission's proposal of 14/07/2021

Under the EU Climate Action Regulation, some countries have the possibility of using a limited number of allowances from the EU ETS to achieve their national targets and thus withdraw them from the EU ETS. The link to the Swiss ETS and a possible link to the UK ETS can also influence the total supply of allowances in the EU ETS.

1.3 Planned auctioning and free allocation of allowances

All allowances available within the EU ETS should in principle be auctioned. However, industry facing international competition receives the majority of the required allowances free of charge to avoid carbon leakage, i.e. relocation of production, investments and related emissions abroad.

In the 2021-2030 period, 57% of the total available allowances are to be auctioned in principle. However, 3% of the available allowances will be kept as a buffer for free allocation, which could reduce the share of auctioning to 54%. This is intended to avert a blanket reduction in free allocation for all installations by a cross-sectoral correction factor. This correction factor guarantees that the total amount of free allocation to installations and operators does not exceed the total amount available for that purpose.

Some of the certificates are reserved for financing two funds already established (see also Section 1.5):

- The proceeds of the Modernisation Fund are available to Member States with comparatively low per capita income to help modernise their energy supply. The EU Commission suggests that 4.5% of the available certificates be channelled into this fund when the revised Directive enters into force instead of the previous 2%.
- The Innovation Fund is to be filled with at least 450 million allowances (instead of 400 million so far). 365 million allowances are to be made available from the free allocation budget, 85 million allowances from the auctioning budget.

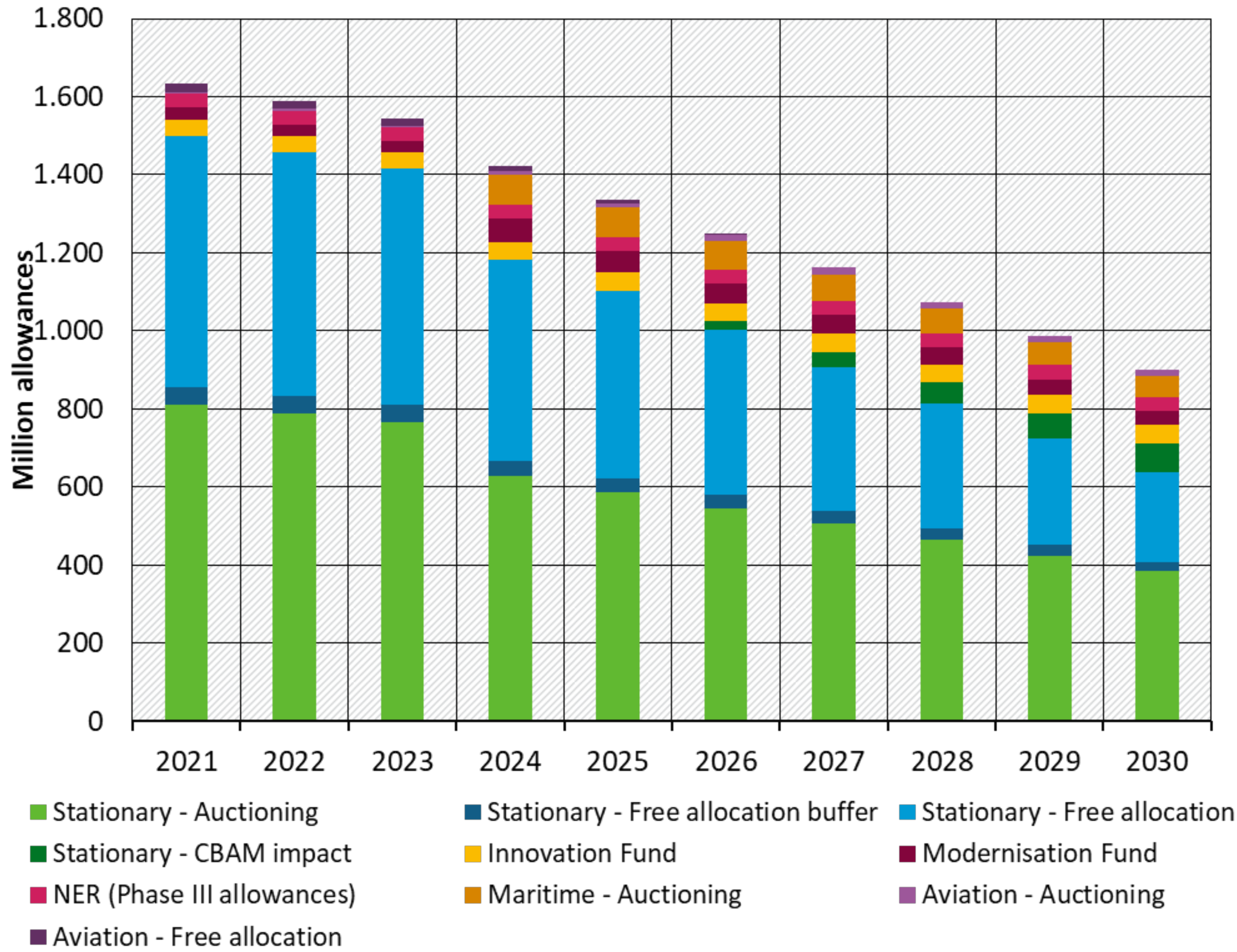
Introducing the carbon border adjustment mechanism (CBAM – see also Fact Sheet 'Carbon border adjustment mechanism') should gradually reduce free allocation for sectors affected by the mechanism from 2026 over a period of 10 years and entirely eliminate it by 2035. The allowances that are thus no longer allocated for free are also set to flow into the Innovation Fund. Finally, allowances will be available for new installations and production increases. This New Entrants Reserve (NER) will be fed by allowances from the third trading period and reductions in planned allocation amounts to individual installations and operators.

Figure 2 summarises the planned distribution of available allowances. It should be noted that these are the ex-ante available budgets and not a projection of the amounts actually used.[5]

No free allocation is planned in maritime transport. In aviation, the auction share is to increase from the currently applicable 15% to 100% in the 2024 – 2027 period. The free allocation of allowances to stationary installations is to be further reduced in line with the sharply decreasing cap. Product benchmarks are to become more stringent from 2026 onwards. In addition, free allocation is proposed to be partially linked to the implementation of energy audit measures.

[5] The actual auction amount deviates from planned amounts, e.g. due to the inclusion of allowances in the MSR (or, if applicable, their release from the MSR). It is also possible that the free allocation budget is not fully exhausted, because installations are closed or because not all allowances from the MSR are used for new installations or expansions.

Figure 2 Ex-ante planned distribution of the cap in the EU ETS



Source: EU Commission proposal of 14/07/2021; 2021 EEA ETS data viewer, Authors' calculation of the impacts of the Carbon Border Adjustment Mechanism.

1.4 Market Stability Reserve (MSR)

Supply management in the EU ETS

A supply management mechanism has been part of the EU ETS since 2019. The Market Stability Reserve (MSR) is intended to reduce the historical surplus of allowances on the one hand and to enable the EU ETS to react more flexibly and in a more rule-based way to future supply and demand shocks on the other. Based on the total number of allowances in circulation (TNAC), the MSR removes allowances from the market or releases them into the market by adjusting the auction amounts in subsequent year.

The EU Commission proposes to maintain the MSR in its basic structure. One of the main MSR parameters - the definition of the total number of allowances in circulation (TNAC) is proposed to also take into account allowances from aviation and maritime transport from the reform's entry into force onwards.

The amount to be withdrawn or released is calculated against the TNAC. If an upper threshold is exceeded, 24% of the TNAC is transferred to the MSR. Under the current regulation this number is reduced to 12% from 2024 onwards. If the TNAC falls below the lower threshold, allowances are released. The thresholds (400 million and 833 million allowances) are not to be adjusted.

However, the EU Commission proposes to apply the current doubled withdrawal rate of 24% up to 2030.

If the TNAC lies in the range of between 833 and 1,096 million allowances, a new special rule is to be applied so that the MSR does not reduce the number of allowances in circulation below the upper threshold of 833 million.

So far, the number of allowances in the MSR is limited to the amount of allowances auctioned during the previous year. The Commission proposes to cap the maximum amount of allowances in the MSR at 400 million.

1.5 Distribution and use of auction proceeds

Auction proceeds in the EU ETS

Proceeds from auctioning allowances are generally available to the country auctioning these allowances. 90% of overall allowances to be auctioned are distributed to participating countries based on historic emissions. The remaining 10% are distributed to lower-income countries based on economic indicators. Certain rules apply to the use of auction proceeds. Furthermore, allowances are auctioned within the framework of the Innovation and Modernisation Funds. The EU Commission also intends to present a proposal whereby auction proceeds may be established as own resources of the EU.

According to the Commission's proposal, Member States should use 100% of the auction proceeds for climate protection measures or compensation measures for low-income households. Previously, this only applied to 50% of the proceeds.

The Modernisation Fund will be increased (see Section 1.3). According to the EU Commission's proposal, its proceeds will be available to a total of twelve countries for modernising their electricity supply.[6] The criteria preventing fossil energy sources to be supported by resources from the fund are to be strengthened.

The Innovation Fund is to be used to finance and implement low-emission technologies and projects. It will also be increased (see Section 1.3) and opened for so-called 'carbon contracts for difference' (CCfD), and measures in maritime transport and in the buildings and transport sectors. In return, the Innovation Fund will receive 150 million allowances from the planned new emissions trading system for buildings and transport. Another 50 million allowances from the third trading period have already been withdrawn from the MSR and auctioned on behalf of the Innovation Fund.

The EU Commission has also announced a proposal to use part of the auction proceeds as new own resources of the EU.

[6] Bulgaria, Croatia, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia

2 Next steps and key issues for the political process

The EU Commission's proposal is discussed by the Member States in the Council of the European Union and by the European Parliament. Both institutions independently decide on the necessary amendments to the proposal. In the following process, the so-called trialogue, representatives of the Council, the European Parliament and the EU Commission, discuss the proposed amendments and negotiate compromise proposals where necessary. After agreement has been reached, the revised reform proposal is formally adopted in the Council and Parliament in the final step and then implemented by the Member States. In the context of the current regulation for the fourth trading period, this process took nearly three years.

Key issues for the political process:

- **Cap trajectory**: The accelerated emission reduction up to 2030 can be achieved through different combinations of an increased LRF and a one-off reduction of the cap. Depending on the combination, the maximum emissions budget up to 2030 and its distribution over the first or second half of the fourth trading period vary. What is more, the choice of combination has an impact on the MSR.
- **MSR:** Scarcity and market stability in the EU ETS results from the interaction of cap trajectories and the MSR. A need for discussion is therefore also expected with regard to the MSR parameters, including on whether the threshold values of the MSR should be adjusted and/or become more flexible. The same applies to the limit to allowances held in the MSR. Depending on the trend of emissions, whether the planned removal rate of 24% is sufficient to remove possible surpluses from the market or whether an even higher removal rate would be necessary could also be discussed. Apart from this, the effectiveness of the MSR will continue to be controversially discussed scientifically, including alternatives to using the TNAC as a basis for managing the supply of allowances.
- **Amount, distribution and use of auction proceeds:** The use of auction proceeds, their distribution among Member States and the size of Modernisation and Innovation Funds are gaining importance in the political discussion. The announced proposal to use part of the auction proceeds as EU's own resources is also likely to be discussed.
- **Free allocation:** The share of free allocation in the total budget of allowances, the tightening of allocation benchmarks, the phase-out of free allocation under the Carbon Border Adjustment Mechanism and the risk that a cross-sectoral correction factor will be applied to allocation amounts will most likely also become points of discussion.
- **Maritime transport and aviation**: Discussions are also expected on the planned extension of the EU ETS to maritime transport and on the proposed changes in the aviation sector, in particular regarding the relationship with CORSIA (see also Fact Sheets 'Maritime Transport' and 'Aviation').

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As of November 2021