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Subject: Compliance under the EU Effort Sharing Regulation

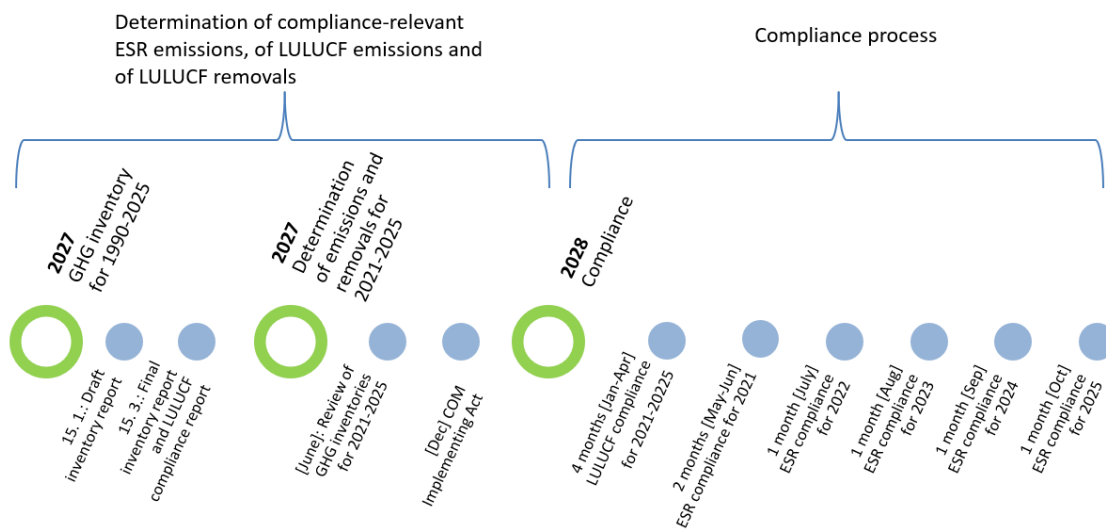
1. Introduction and summary

The Effort Sharing Regulation entered its second phase in 2021. Based on the Effort Sharing Regulation (2018/842, ESR), the regulations of the Effort Sharing Decision (ESD) for the first period from 2013 to 2020 will fundamentally be continued in the second phase from 2021 to 2030. However, the flexible elements have been supplemented and changed, and the compliance processes have been substantially condensed. For example, the review will be carried out collectively in two compliance periods: in 2027/2028 for the years 2021-2025 and in 2032/2033 for the years 2026-2030. Through the revision of the ESR in 2023 as part of the Fit for 55 package, details of the flexibility regulations have been changed in addition to the national targets.

Another factor that will cause differences in the current phase is the foreseeable higher demand for tradable emission allocations (Annual Emission Allocation - AEA). This is due both to the insufficient success that is currently expected with regard to reducing emissions in the affected sectors and to the stricter requirements for reducing emissions. While there was a considerable surplus of emission allocations in the first phase up to 2020, it can be assumed that the question of which of the various options to use for compliance in the current phase from 2021 to 2030 will be challenging for most Member States.

The following section provides an overview of the timeline for compliance under the EU Effort Sharing Regulation. The consistent and continuous reduction of emissions in the affected sectors is of paramount importance so that the emission allowances allocated for free in 2021-2030 are ideally sufficient to cover emissions and the climate targets are achieved. The schedule for reviewing compliance (known as the compliance process) in 2028 and 2033 is very tight, see Figure 1-1. This short period is primarily for making the corresponding entries in the registry and leaves little time for coordination processes, either within the individual Member States or between them. Measures to cover an emerging gap to fulfilling the emission targets should be planned annually – as early as possible – and negotiated with other Member States if applicable. This is necessary because of the high demand expected for emission allocations, but also underlines the need for domestic emission reductions.

Figure 1-1: Determination of relevant emissions and removals and compliance process in 2027/2028



Note: Times in square brackets [] are based on experience and are not fixed. The compliance process begins with the publication of the Implementing Act to determine the emissions and removals for 2021-2025; the duration of each subsequent step is specified. The cycle takes place analogously in 2032/33 for the 2026-2030 period.

Source: Oeko-Institut

2. Determination of emissions and removals

The compliance process starts in 2027 and 2032 respectively, when the emissions and removals for 2021-2025 and 2026-2030 have been determined.

In accordance with the European Governance Regulation (2018/1999 (EGR) Art 26 (3)), draft greenhouse gas inventories for all years up to the previous year (t-2) are submitted to the European Environment Agency (EEA) on 15 January each year and the final inventories on 15 March. These inventories must be reported to the United Nations on 15 April in accordance with the United Nations Framework Convention on Climate Change (UNFCCC). Preliminary estimates of emissions for the previous year (t-1) must be submitted by 31 July of each year (EGR Art. 26 (2)). In Germany, the preliminary data, the so-called “previous year’s estimate,” is available on 15 March.

A review process begins after the emission inventories have been submitted in 2027 and 2032 (EGR Art 38). This includes the LULUCF¹ compliance reports, which are to be submitted in March 2027 and 2032 respectively. The timeline for the review process is laid out in an implementing decision (Art. 30, 2020/1208). Once the review has been completed, the emissions and removals of the five reviewed years of all EU Member States will be set in an implementing decision in which they are broken down into effort sharing and LULUCF emissions or removals. It can be assumed that this

¹ Land Use, Land Use Change and Forestry (LULUCF), i.e. the land use sector.

implementing decision will be available towards the end of 2027 and 2032 respectively. These figures will ultimately also be transferred to the Union Registry.

The emissions specified in 2027 and 2032 in the implementing decision for the respective emission years (2021-2025 and 2026-2030) are decisive for compliance. Even if there are still changes in the inventories and thus the ESR emissions in each year up to the date of their determination, the deviations from the final figures in the implementing decision tend to be small. This means that a largely accurate estimate of the difference between one year's emission allocations and the ESR emissions is already possible in March (the previous year's estimate) of each year for the past years. This estimate is sufficiently reliable to gain an overview of a country's compliance situation.

Prior to 2027, emissions and removals from the LULUCF sector and thus the availability of Land Mitigation Units (LMUs) are difficult or even impossible to estimate. This is because complex accounting rules apply for the first period, the results of which cannot be simply derived from the inventory. In addition, there are still considerably larger changes between the annual inventories in terms of the LULUCF emissions and removals, and the comparative figures for calculating the individual LULUCF categories are only finalised at the end of the period. With the revision of the LULUCF Regulation (2023/839), only the results of the GHG inventory will be used for the 2026-2030 period, making it easier to estimate the result.

3. Compliance

3.1 LULUCF compliance

Compliance with LULUCF targets will be checked four months after the implementation decisions upon publication of the defined LULUCF emissions and sinks (removals) at the end of 2027 and 2032 (EGR Art. 38 (5)).

EU Member States fulfil the LULUCF Regulation when the LULUCF emissions do not exceed the sinks in the 2021-2025 period (LULUCF Reg. Art. 4). For the 2026-2030 period, an absolute sink target for 2030 must be achieved by each Member State, and each Member State must adhere to a fixed national budget in 2026-2029.

Flexibilities can be used for compliance under the LULUCF Regulation (LULUCF Reg. Art. 11): If, even after using the flexibility rules in the 2021-2025 period, emissions in the LULUCF sector are higher than the sinks, or if more emissions are emitted in 2026-2029 than permitted under the budget and/or the target for the LULUCF sinks for 2030 is not achieved, the differences must be offset. The flexibility provisions include offsets for managed forest land (LULUCF Reg. Art. 13), the land use mechanism for the 2026-2030 period (Article 13b), the use of emission allocations from effort sharing and the purchase of LMUs from other Member States (LULUCF Reg. 12(1) & (2)). Member States have four months from the date on which the figures are published in the implementing decision to decide whether they will use the flexibility options (see Figure 1-1: Jan-Apr 2028).

3.2 Compliance under the EU Effort Sharing Regulation

Four months after the ESR emissions have been published in the Implementing Directive, compliance under the Effort Sharing Regulation starts for 2021 with the entry of LULUCF compliance in the registry (expected in May 2028 and 2033 respectively). Deviations from targets under the LULUCF Regulation are offset by deletions from the annual emission allocation (AEA) (ESR Art. 9(2)).

Emissions for 2021 subject to the ESR must now be offset within two months at the latest through emission allocations in the registry (EGR Art. 38 (6)). After this, the compliance check for the following years is performed on a monthly basis – in 2028 for the years 2022 to 2025 and in 2033 for the years 2026 to 2030. It should be noted that the necessary AEA quantities must be demonstrated for each of these subsequent years within one month. The corresponding entries in the registry must therefore be made during this period. In this short period of time, it cannot usually be decided what allocations and flexibilities are to be used for fulfilment. Rather, this must be prepared at an early date within the individual Member States. If a country is not able to achieve compliance for a year within the given period, the remaining difference is added to the emissions not covered by the AEA for the following year with an annual penalty of 8 % (ESR Art. 9(1)a).

Negotiations on the purchase of emission allocations between the countries should therefore take place in advance so that the transfer of AEAs that can be entered in the registry can take place in good time. It should also be noted that purchased emission allocations originate from an annual budget and can only be used for that year and future years (banking) and not for the compliance of previous years. This means that the purchase of AEAs from previous years offers the advantage that they can contribute to compliance over longer periods of time. However, they may conflict with the purchasing Member State's motivation to take effective national measures to reduce emissions. Selling countries, however, tend to avoid selling AEAs from earlier years and to sell late: by selling early, they would forego the possibility of banking and thereby reduce risk if emission reductions do not occur as expected in later years.

Various allocations and flexibilities can be used for compliance:

- The allocated emission allocations can be used, the absolute quantities of which are set via the Annex to the Implementing Decision C(2023) 4250 for the years 2021-2025. For 2026-2030, a corresponding decision will be adopted in 2025 (ESR Art. 4(3)).
- To a limited extent, emission allocations that have been banked or transferred or emission allocations from the following year (borrowing) can be used (ESR Art. 5 (1-3)).
 - For 2021, banking is limited to 75 % of the AEA for 2021 and 25 % of the cumulative AEA up to the respective year in 2022-29.
 - Borrowing is limited to 7.5 % of the AEA of the following year for 2021-2025 and 5 % of the respective following year for 2026-2029.
- In individual countries, a small number of EU ETS² allowances can be used if they were reported to the European Commission by the end of 2019, 2024 and 2027 (ESR Art. 6 and Annex II). This option is subject to certain conditions. Not all authorised Member States have

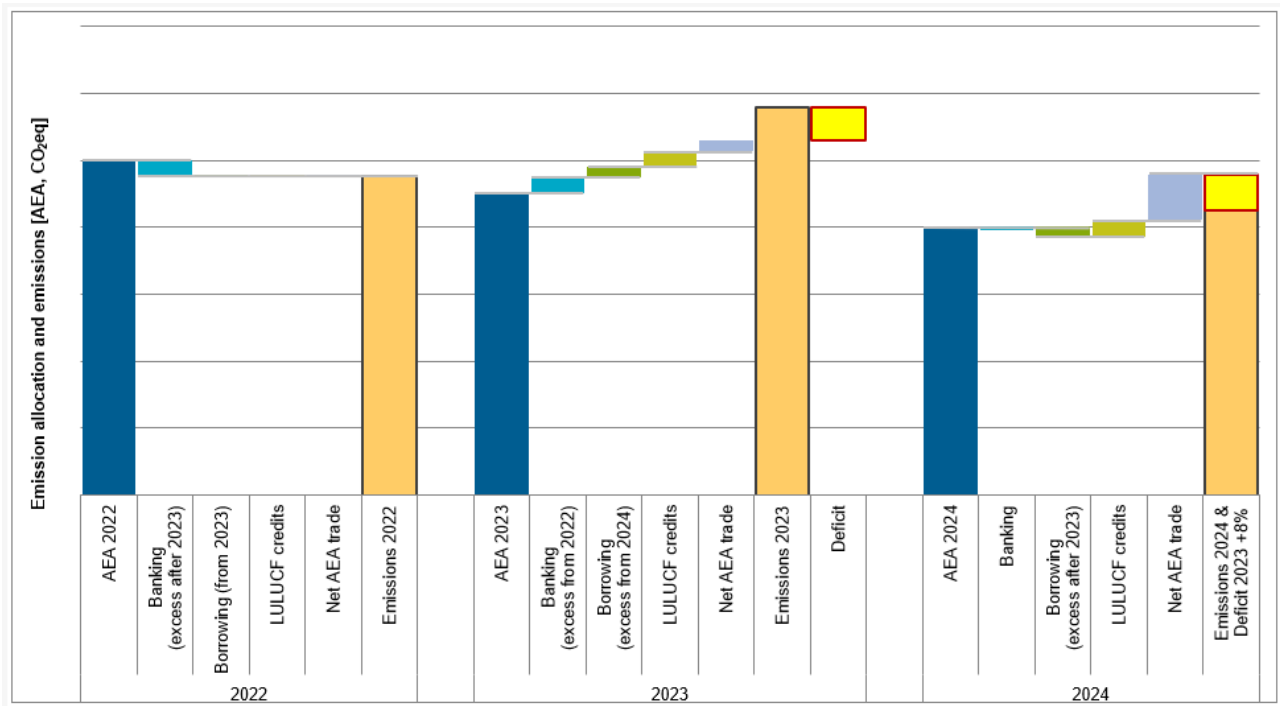
² Emissions Trading System (ETS).

made use of this to date since they lose the corresponding income from the auctioning of ETS allowances in return. Germany cannot use this mechanism.

- To a limited extent, LULUCF credits (LMUs, ESR Art. 7 and Annex III) can be used, provided that a greater sink was achieved in the LULUCF sector than was necessary and there is a deficit under the ESR. A maximum total of 22.3 million LMUs can be used in the case of Germany; pursuant to the revision in 2023, this total has been divided equally between the 2021-2025 and 2026-2030 periods.
- Unlimited emission allocations transferred from other EU Member States can be used:
 - EU Member States can transfer part of their emissions allocations for a given year to other Member States. For 2021-2025, the limit is 10 % and thereafter 15 % (ESR Art. 5 (4)). These transferred emission allocations can be used for compliance in the same year or later years up to 2030.
 - Following the review and taking into account the use of all flexibilities, Member States can transfer any surplus allocations from previous years to other Member States (ESR Art. 5 (5)).
- Emission reductions from intergovernmental projects to reduce emissions can be used (ESR Art. 5(8)). However, such projects have not yet been implemented.
- In 2032, it will be determined whether the EU as a whole has achieved the ESR target. In this case and in addition to the above-mentioned flexibility options, a safety reserve of a maximum of 105 Mt CO₂eq will be made available, which can be used under certain conditions by Member States with a below-average historical GDP per capita. This option does not apply for Germany.

Figure 3-1 provides an example – for purely illustrative purposes – of compliance fulfilment over three years, from 2022 to 2024. In 2023, the emissions are above the annual emission allocation (AEA). As a result, ESR Art. 9(1)a comes into force: the difference in 2023 is allocated to the emissions of the following year with a surcharge of 8 %, thereby increasing the emissions that must be balanced using the AEA in the following year.

Figure 3-1: An example of compliance for three years



Notes:

- Examples: 2022 surplus with banking after 2023; 2023 deficit despite borrowing from 2024 and AEA purchase (not realisable to a sufficient extent); in 2024 compliance is then achieved through AEA trading. Non-compliance in 2023 results in a penalty surcharge of 8 % in 2024 on the remaining deficit from 2023.
- Banking (ESR Art. 5.3): up to 75 % of the AEA for 2021 and 25 % of the cumulative AEA up to the respective year in 2022-29.
- Borrowing (ESR Art. 5.1/5.2): in the 2021-2025 period, up to 7.5 % from the following year, in the 2026-2029 period, up to 5 %. No borrowing from 2031.
- AEA trade (ESR Art. 5.4/5.5): unlimited for surpluses from previous years and up to 10 % of the AEA budget for the respective year 2021-2025 or 15 % of the AEA budget for the respective year 2026-2030.
- LULUCF (ESR Art. 7): Only possible if emissions in the respective year > AEA incl. banking of all subsequent years. If LULUCF is the source of emissions, it must be offset via the AEA (i.e. allocations deleted) (LULUCF Art. 12.1).
- Deficit (ESR Art. 9.1): if there is a deficit, this is multiplied by 1.08 and added to the emissions of the following year.

Source: Oeko-Institut