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Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2003/87/EC and Decision (EU) 2015/1814 as regards driving competitiveness and cost-effective decarbonisation

{COM(2026) 619 final} - {COM(2026) 620 final} - {SEC(2026) 616 final} - {SWD(2026) 616 final} - {SWD(2026) 617 final} - {SWD(2026) 618 final}

(Text with EEA relevance)

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

The EU emissions trading system (EU ETS) is the cornerstone of the EU's climate policy, driving decarbonisation, competitiveness and resilience. Directive 2003/87/EC (the 'ETS Directive') lays down the rules for greenhouse gas (GHG) emission allowance trading within the EU. The market stability reserve (MSR) for the EU ETS was established by Decision (EU) 2015/1814 (the 'MSR Decision')[1] to make the EU ETS more resilient in relation to supply-demand imbalances. Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of greenhouse gas emissions from maritime transport[2] (the MRV Maritime Regulation) completes the set of legislative acts regulating the EU ETS.

Regulation (EU) 2021/1119 of the European Parliament and of the Council (the European Climate Law)[3] set a legally binding economy-wide target of achieving net-zero GHG emissions by 2050. The ETS Directive and the MSR Decision were amended in 2023 by Directives (EU) 2023/958 and (EU) 2023/959[4] as part of the 'Fit for 55' package, which aimed to make all sectors of the EU's economy fit to meet the intermediate 2030 target of reducing net GHG emissions by at least 55% by 2030, compared to 1990 levels.

The world today looks different than a few years ago. Russia's war of aggression against Ukraine and the conflict in the Middle East confront the EU once again with rising energy prices, damaging the industrial competitiveness of the European industry. Simultaneously, climate change is intensifying, with extreme weather events in Europe becoming more frequent and severe. To face these challenges, the EU needs to invest in homegrown and clean energy and continue decarbonisation to reduce its dependencies and strengthen industrial competitiveness, while promoting a just and socially fair transition for all. This was already

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1 Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, pp. 1-5, ELI: http://data.europa.eu/eli/dec/2015/1814/oj).

2 Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55-76, ELI: http://data.europa.eu/eli/reg/2015/757/oj).

3 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, pp. 1-17, ELI: http://data.europa.eu/eli/reg/2021/1119/oj).

4 Directive (EU) 2023/958 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC as regards aviation's contribution to the Union's economy-wide emission reduction target and the appropriate implementation of a global market-based measure (OJ L 130, 16.5.2023, pp. 115–133, ELI: http://data.europa.eu/eli/dir/2023/958/oj) and Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system (OJ L 130, 16.5.2023, pp. 134–202, ELI: http://data.europa.eu/eli/dir/2023/959/oj).

set out in the Competitiveness Compass[5] and the Clean Industrial Deal[6] which were adopted in 2025. The rapidly changing geopolitical context makes this even more relevant.

The EU has adopted a legally binding climate target of 90% reduction in net GHG emissions for 2040[7]. The 2040 climate target provides the necessary predictability and stability for investments in the EU's clean energy transition and for driving industrial competitiveness, taking full account of the current economic, security and geopolitical landscape, in alignment with the EU's Competitiveness Compass[8], the Clean Industrial Deal[9] and AccelerateEU[10]. To achieve the new economy-wide 2040 climate target, Article 4(4) of the European Climate Law requires the climate and energy acquis to be revised and updated.

In its conclusions of 19 March 2026[11] the Council invited the Commission to present a review of the EU ETS by July 2026 at the latest, to reduce the volatility of the carbon price and mitigate its impact on electricity prices, including related supply chain costs, and on diversion of activities, while preserving the essential role of the ETS in the climate and energy transition through a market-based price signal for carbon emissions that drives investment and innovation. The Council, the Parliament and the European Commission, signed the 'One Europe, One Market' roadmap in April 2026 setting Q1 2027 as target for agreeing on the review of the EU ETS.[12]

The present review of the EU ETS is the first part of a package of proposals to contribute to Europe's economic resilience and competitiveness and achieve the economy-wide 2040 climate target. Thus, the objective of this proposal is to ensure that the EU ETS continues to support the achievement of economy-wide carbon neutrality by 2050 in a market- and rule-based, technology-neutral and economically cost-effective manner, while fostering simplification, strengthening its role as an innovation and investment engine driving competitiveness, as well as rewarding economic first-movers and frontrunners and providing more support to help industry make the transition.

The EU ETS has demonstrated its effectiveness, as ETS sectors have reduced their emissions by over 50% since 2005, while the economy has continued to grow. The EU ETS is an essential driver of clean electrification. Emissions from electricity and heat production have dropped by 58% while capacity has expanded by 24% since 1990, incentivising the deployment of homegrown, clean energy sources such as renewables, benefitting clean

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5 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, A Competitiveness Compass for the EU, COM(2025) 30 final.

6 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation, COM/2025/85 final.

7 Regulation (EU) 2026/667 of the European Parliament and of the Council of 11 March 2026 amending Regulation (EU) 2021/1119 as regards the setting of a Union intermediate climate target for 2040 (OJ L, 2026/667, ELI: http://data.europa.eu/eli/reg/2026/667/oj).

8 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions A Competitiveness Compass for the EU (COM(2025) 30 final).

9 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation (COM(2025) 85 final).

10 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions AccelerateEU - Energy Union (COM(2026) 370 final).

11 European Council Conclusions of 19 March 2026 EUCO 1/26 CO EUR 1, CONCL 1.

12 One Europe, One Market Roadmap of the European Parliament, the Council of the European Union and the European Commission 23 April 2026, 8473/26.

producers and boosting industrial competitiveness and resilience. Furthermore, together with the Carbon Border Adjustment Mechanism (CBAM), the ETS has helped to persuade many other countries to set up their own carbon pricing schemes. The World Bank estimates that today, around 30% of global emissions are covered by carbon pricing, and this share is growing.

The EU ETS should continue driving economic modernisation and decarbonisation. At the same time, the transition towards climate neutrality requires strong support for Europe's industrial and clean tech sectors. The 2023 review of the EU ETS introduced several review clauses to assess the appropriateness of potential adjustments to the system on aviation, maritime and stationary installations in 2026, under Articles 3gg, 28b and 30 of the ETS Directive. In addition, Article 3 of the MSR Decision imposes a legal obligation to review that Decision, with the next review due in 2026. This proposal introduces the relevant measures resulting from the impact assessment carried out to address those review clauses. It preserves the core strengths of the carbon market and its price signal as a driver for investments, while adapting its design and introducing targeted simplifications to reduce administrative burden and make the system more effective.

The leading role of the EU ETS to achieve economic modernisation and decarbonisation is recognised by the importance of its linking agreements with close partners such as Switzerland, pursuant to Council Decision (EU) 2018/219 of 23 January 2018, and the UK with whom negotiations are under progress. Those agreements are key instruments to avoid carbon and distortion of competition.

Ensuring a predictable carbon market for ETS sectors

The revision should align the EU ETS with the 2040 and 2050 climate targets, enabling a more gradual decarbonisation pathway. It should also and take into account the agreement found in the amendment of the European Climate Law, including to integrate permanent carbon removals, taking into account residual hard-to-abate[13] emissions notably in energy intensive industries (EIIs), and fostering the deployment and availability of those technologies at the required scale, kickstarting the market.

The European Climate Law also includes a possibility to use a limited quantity of high-quality international credits to make an adequate contribution towards the economy-wide 2040 target, starting in 2036. They can amount up to 5% of 1990 EU net GHG emissions, corresponding to a domestic reduction in net GHG emissions of at least 85% compared to 1990 levels by 2040. A pilot period may be considered for 2031-2035. International credits should be integrated into the future climate legislation in a way that achieves high ambition in a cost-efficient way. The use of credits should support both the EU and non-EU countries in achieving GHG reductions compatible with the Paris Agreement. The specific deployment of international credits will be based on a thorough impact assessment and subject to the development of Union law setting robust and high integrity criteria and other safeguards. This proposal takes into account the purchase of these international credits to complement domestic action, translating into additional domestic emission space for ETS sectors.

The MSR rules under the EU ETS aim to tackle structural supply-demand imbalances between the available allowances to emit CO_2 and the emissions of the companies covered. A principle underlying the system's design is that the market will gradually become smaller. As a result, the EU ETS's contribution to cost-effective emission reductions may be hampered by increased market inefficiencies. This proposal therefore also reviews the MSR more

[13] See Draghi Report, Part B, section 'The root cause of the EU's competitiveness gap'.

comprehensively, complementing the Commission's proposal of 1 April 2026[14], to continue to ensure market stability, predictability and a smooth carbon price development.

Making the EU ETS a stronger innovation and investment engine driving competitiveness

A crucial objective of the proposal is to substantially increase investments in our energy system and industry. Europe's capacity to generate clean, homegrown and affordable energy, in particular electricity, should be increased, replacing current expenditure on imported fossil fuels with capital investment in economic modernisation. Over the coming decade and to achieve climate neutrality by 2050, industry has to go through a significant transformation to modernise, decarbonise and switch to cleaner and more energy-efficient technologies, for example by electrifying, using hydrogen from renewable sources, deploying carbon capture, utilisation and storage (CCUS), and generating carbon removals. At the same time, EU industry needs to remain competitive in a global market and ensure quality jobs, in line with the objectives of the Clean Industrial Deal. This transformation requires stepping up investments substantially. This includes a skilled workforce capable of deploying the technologies needed in relevant ETS sectors.

For this, a predictable ETS price signal and targeted use of its revenues are essential. The EU ETS is a key financing mechanism for the green transition. Since 2013, it has raised over EUR 270 billion, with approximately 75% allocated to Member States, and given free allocations worth EUR 255 billion. To maximise the system's climate impact, revenues must be spent strategically on measures that accelerate decarbonisation and enhance industrial competitiveness. Since June 2023, Member States have been required to spend 100% of ETS revenues on climate and energy purposes and to ensure visibility of this spending. However, transparency and effectiveness remain insufficient. Current spending patterns reveal critical gaps: only a small fraction of revenues around 5%, directly supports industrial decarbonisation in sectors such as steel, chemicals and fertilisers. Together, the industrial sectors are responsible for about 47% of EU ETS emissions. Additionally, some investments risk undermining climate neutrality by perpetuating dependencies on carbon-intensive technologies, such as fossil fuel infrastructure, which could lead to long-term lock-in effects. ETS revenues should be reinvested in innovation, clean tech and industrial decarbonisation of ETS sectors at a much larger scale, at both EU and national level, to reward the frontrunners in the transition and incentivise the industrial backbone of Europe. Improved spending should be accompanied by greater visibility of the use of revenues, which is now limited.

The carbon price signal provides an incentive for industrial decarbonisation, and together with the system of free allocation and the CBAM there is protection against carbon leakage. In addition, carbon pricing works hand in hand with regulatory measures such as targets and requirements related to energy efficiency, homegrown clean energy sources such as renewable energy or decarbonised transport and industry. In many sectors (e.g. steel, cement or chemicals), however, free allocation (together with the regulatory framework) has not been conducive to driving transformational change and should be more clearly linked to much-needed investments inside Europe, while in the near future, investments will still be lacking a bankable business case. This is why the Clean Industrial Deal announced the Industrial Decarbonisation Bank (IDB), with EUR 100 billion in funding, within the governance of the future Competitiveness Fund. The IDB aims to promote the scale-up and roll-out of more mature industrial decarbonisation projects, notably in EIIs across all Member States, to be

[14] Proposal for a Decision of the European Parliament and of the Council amending Decision (EU) 2015/1814 as regards ceasing the invalidation of allowances in the market stability reserve (COM(2026) 153 final).

funded mostly by reserving a certain share of ETS allowances[15]. To kick-start such investments and drive long-term competitiveness, the ETS Investment Booster will be available already before 2030 to ensure timely support and be designed so as to promote solidarity. With the IDB focusing on scale-up and roll-out, addressing the commercial risks faced by industrial decarbonisation projects, it is also necessary for the Innovation Fund to continue to support the commercialisation of innovative and first-of-a-kind technology. The EU ETS thus supports the objectives of the Clean Industrial Deal by providing a clear and predictable carbon price, incentivising investment in decarbonisation solutions while continuing to provide carbon-leakage protection and reinvesting the revenues the system generates.

Dedicated mechanisms are ensuring continued solidarity with lower income Member States, including the redistribution of 10% of auctioning revenues, the Modernisation Fund, and guaranteed access to the ETS Investment Booster. They should also continue to assist lower-income Member States in modernising their energy system and accelerating industrial transformation.

Delivering a whole-of-economy transition

To deliver a whole-of-economy transition, all sectors need to contribute a fair share to the EU's climate targets. This includes applying an effective carbon price signal to the EU's fair share of aviation emissions . Aviation accounts for 2-3% of global CO_2 emissions[16] and is a source of non-CO_2 climate impacts at least as significant as those of CO_2. Aviation's share of EU transport emissions today is 14%, or around 4% of the EU's total CO_2 emissions. By 2050, aviation's share is expected to grow to around 90%[17]. Long-haul flights fuel this growth, and they should be covered by a meaningful carbon price. Globally, the International Civil Aviation Organization (ICAO) projects that international aviation emissions will continue to grow[18]. The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) aims to offset most of that growth[19]. Aviation, like shipping, has important decarbonisation challenges as a hard-to-abate sector, marked by long asset lifetimes, significant capital intensity and a current scarcity of immediate alternatives to fossil fuels.

Maritime transport represents around 14% of total EU transport emissions, or around 4% of total EU CO_2 emissions. Its green transition will require the mobilisation of the whole EU maritime value chain as well as substantial investment in enhancing vessel efficiency, developing new sustainable propulsion technologies and scaling up the production and

15 The IDB will be placed within the governance of the future European Competitiveness Fund to ensure that both funding instruments are complementary. The European Competitiveness Fund will also support decarbonisation of EIIs. Considering the high investment needs of those sectors both instruments are needed but should be designed as complementary in supporting technological development, types of instruments offered and role in the project's investment journey. This will be also facilitated by the common governance framework.

16 EASA, European Aviation Environmental Report, 2025 https://www.easa.europa.eu/en/domains/environment/eaer/downloads#download-2025.

17 Source: Figure 76, Direct CO_2 emissions from the EU transport sector by mode, Annex 8, Climate Target Impact Assessment, and Section 1.5.5, page 97. https://eur-lex.europa.eu/resource.html?uri=cellar:6c154426-c5a6-11ee-95d9-01aa75ed71a1.0001.02/DOC_3&format=PDF.

18 'By 2050, global aviation will need to serve 12.4 billion passengers annually - nearly triple today's volume.', https://www.icao.int/sites/default/files/publications/Aviation%20Budget%20Brochure/ICAO-Budget-Brochure-eVersion-27Mar25.pdf.

19 ICAO notes that due to partial participation in CORSIA, international aviation emissions will continue to grow above the CORSIA baseline level (~500 $MtCO_2$ per year). Source: ICAO A42-WP/28 Report – Technical Assessments in Support of the 2025 CORSIA Periodic Review, https://www.icao.int/sites/default/files/Meetings/a42/Documents/WP/wp_028_en.pdf.

distribution of sustainable renewable and low-carbon fuels, including by upgrading port and energy infrastructure. Moreover, the International Maritime Organization (IMO) is developing, a global measure to implement the IMO 2023 GHG strategy, which aims, among other things, to reach net-zero emissions from international shipping by, or close to, 2050. The EU ETS might need a mechanism that makes it possible to support the new global measure once adopted, preventing, in particular, double payments but preserving the price signal and incentives for ships calling at EU ports.

For aviation and maritime, complementary policies such as RefuelEU Aviation and FuelEU Maritime work in synergy with the EU ETS's multiple incentives supporting the uptake of more sustainable fuels[20]. The Competitiveness Compass, the Clean Industrial Deal and the EU's Industrial Carbon Management strategy[21] also set the objective to decarbonise the economy by accelerating the transition to more circularity of materials and carbon, supporting the EU's economic security, resilience and competitiveness. The revision of the EU ETS provides an opportunity to incentivise and scale up the circularity of carbon as a key decarbonisation pathway for hard-to-abate sectors like cement, steel and chemicals and to ensure the availability of alternative carbon feedstocks. The gradual inclusion of waste incineration supports this objective by closing the loop, while supporting the business case for more circularity of materials, reducing GHG emissions from waste disposal and generating recycled materials displacing more carbon-intensive virgin materials. In addition to losing valuable resources, waste can have significant negative impacts on human health and the environment. For example, incinerating waste can contribute to air pollution, while landfills might contaminate water and land. GHG emissions from municipal waste incineration are significant at around 40 $MtCO_2eq$ fossil CO_2 emissions per year but are currently not subject to dedicated decarbonisation policies in most Member States. A comprehensive framework, including the sector's inclusion in the EU ETS and strengthened circular economy policies under the upcoming Circular Economy Act[22], is needed to support economy-wide circularity and contribute to the decarbonisation of the sector.

As such, the review aims to: (i) ensure that the market remains efficient and creates an incentive to invest in decarbonisation in the global context; and (ii) address specific challenges faced by covered sectors to facilitate their uptake of available solutions to decarbonise, while taking account of other legislative acts that facilitate the clean transition and the competitiveness of EU industry.

Therefore, this proposal encompasses the below measures.

i. It aligns the system with the Union's 2040 emission reduction target of -90%, adjusting the EU ETS reduction trajectory from 2031. This change permits the continued issuance of allowances into the 2040s.

ii. Takes into account the possible purchase of 260 million international credits to complement domestic action and reducing it to -85% compared to 1990, translating into additional domestic emission space in the ETS. This is operationalised through the

[20] For aviation, ReFuelEU Aviation sets targets for fuel producers to supply an increasing share of sustainable aviation fuels, starting with 2% of certain biofuels in 2025 and 6% in 2030 (of which 0.7% synthetic fuels), and for airlines to uplift fuel. For the maritime sector, FuelEU Maritime sets maximum limits for the yearly average GHG intensity of the energy used by ships above 5 000 gross tonnage calling at European ports, regardless of their flag.

[21] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Towards an ambitious Industrial Carbon Management for the EU (COM/2024/62 final).

[22] Regulation (EU) […./..] of the European Parliament and of the Council [Circular Economy Act] [OJ reference to be added once adopted].

establishment of an LRF aligned with the domestic ambition level resulting from the purchase of international credits for the benefit of the ETS sectors and setting aside allowances to purchase those international credits. In case insufficient high-quality and high-integrity, cost-effective international credits are available, the LRF is aligned with the EU domestic ambition of -90% by 2040.

iii. It integrates domestic permanent carbon removals into the EU ETS through the increase of cap by an amount of allowances equivalent to the quantity of removals that will be bought by the Commission, thus creating guaranteed additional emission space for the hardest-to-abate sectors and supporting the scale-up of the carbon removals industry, while ensuring control of the quality and quantity of the removals.

iv. It reforms the MSR to ensure a stable and liquid market and smooth price development against the background of a shrinking market.

v. It extends free allocation and indirect carbon cost compensation beyond the current period, while free allocation is made conditional on the submission of plans to invest in decarbonisation in the EU as well as on the implementation of such decarbonisation investments in the EU.

vi. It increases financial support to innovation and investment for decarbonisation, notably for industrial decarbonisation, so a higher share of EU ETS revenues is returned to sectors covered by the EU ETS. It sets up the IDB to provide EUR 100 billion in funding to industrial decarbonisation projects.

vii. It extends the Innovation Fund in order to support the market introduction of low-carbon innovation and make clean-tech industries more competitive.

viii. It strengthens requirements for Member States's auction-revenue spendings, including by introducing minimum spending on priority sectors and making visibility mandatory.

ix. It continues to provide solidarity via the Modernisation Fund as a means to support the modernisation of energy systems and industrial decarbonisation in lower-income Member States, while updating the eligibility criteria and distribution key.

x. It continues the redistribution of 10% of auction volume to lower-income Member States, for reasons of solidarity and channelling these resources for climate purposes.

xi. It aims to achieve effective carbon pricing of the EU's fair share of international transport emissions through an appropriate application of the EU ETS to flights departing to the immediate neighbourhood of the Union. This includes support for multilateralism through a deduction mechanism of CORSIA offsetting costs, which avoids double pricing. For Iceland, as regards the ETS scope as in force since 2023, the Commission would be favourable to an extension of the existing mechanism in the Joint Committee Decision of three years.

xii. It establishes dedicated, direct support to maritime and aviation that promotes, in particular, the uptake of EU-produced sustainable aviation and maritime fuels, clean technologies and hydrogen.

xiii. It provides for a review of the EU ETS in the event of the adoption of an IMO global measure to avoid the risk of double payments while preserving the environmental integrity of the EU ETS.

xiv. It further addresses the risk of evasion in the maritime sector through new measures and supports a level-playing field through a targeted extension of the ETS's scope to specific categories of small vessels (with a gross tonnage below 5 000 but not below 400).

xv. It introduces targeted simplification measures to benefit the industry and public authorities by reducing administrative compliance costs and enhancing the effectiveness of the system's implementation.

xvi. It integrates municipal waste incineration into the EU ETS. The point of accounting for carbon capture and utilisation (CCU) is placed downstream for products and at fuel distributor level for e-fuels. This enables a decarbonisation route for industries with hard-to-abate emissions.

A new emissions trading system covering CO_2 emissions from fuel combustion in buildings, road transport and small industry (ETS2) was created in the 2023 revision of the ETS Directive. ETS2 is excluded from the scope of this proposal as it will become fully operational in 2028, its application is due for review by 2029, and any assessment of the feasibility of integrating the sectors under ETS2 into the EU ETS is due by 2031.

- **Consistency with existing policy provisions in the policy area**

All sectors of the economy should contribute to the reduction of GHG emissions. The present review of the EU ETS is the first part of a broad package of measures to ensure the EU is prepared to achieve its 2040 climate ambition with a revised energy and climate framework, while reaping all the benefits of the green transition and enhancing the EU's competitiveness.

All initiatives in the package are closely interlinked and use common modelling and assumptions, and each one depends on the design of the others. Emissions are distributed across policy instruments according to considerations of cost-effectiveness, technological viability and Member State specificities, including on their choice of homegrown clean energy sources. The impact assessments supporting the EU ETS revision and forthcoming proposals incorporate cross-sectoral analysis, expert and stakeholder input, and the implications of recent geopolitical developments. They also reflect the objectives and measures outlined in Member States' national energy and climate plans (NECPs).

The analysis shows that achieving the required emissions reductions and carbon removals will require a balanced policy mix, including targeted support measures, stable carbon pricing, clear targets with appropriate flexibility, and streamlined yet effective regulation. These principles underpin the policy design, supporting investment, innovation, and competitiveness. The framework is further supported by a robust governance structure that integrates planning, financing, cooperation, and progress monitoring, while strengthening resilience to the growing impacts of climate change.

Given the EU's enlargement ambitions, the framework's design and implementation must also consider the integration of candidate and potential candidate countries. Consideration should be given in the accession process to how the EU ETS solidarity mechanisms and funds should cover enlargement countries. Overall, it is aligned with the 2040 objectives, covers all sectors of society, and maintains an appropriate balance between national and EU-level legislation.

The proposal to revise the EU ETS is a key component of this framework, building on the proposals for CO_2 emission standards for cars and vans adopted in December 2025 and for the revision of the MSR adopted in April 2026. The EU ETS will continue to drive emission reductions and economic transformation throughout the 2030s. The review aims to preserve the effectiveness of the carbon market while refining its design to better support industrial competitiveness, decarbonisation, innovation, investment, and Europe's strategic resilience. For the broader framework of climate and energy policies, a strong and predictable carbon price remains essential to encourage investment in homegrown low-carbon energy, electrification, and clean technologies, while providing long-term certainty for investors.

Additional legislative proposals on national targets as well as the use of international credits, are expected later in 2026.

- **Consistency with other Union policies**

The Clean Industrial Deal brings together climate action and competitiveness under one overarching growth strategy. It is a commitment to accelerate decarbonisation, reindustrialisation and innovation, all at the same time, while making Europe resilient. It aims to present European industry with a stronger business case for large climate-neutral investments in EIIs and clean tech. The review of the EU ETS plays a central role in achieving these objectives and is therefore consistent with the broader set of Union policies that are part of the Clean Industrial Deal.

Meeting the EU 2040 climate targets and implementing related policies will require sustained investment in modernising the energy system over the coming decades. Alongside initiatives such as the Clean Industrial Deal, the Industrial Accelerator Act[23], the Clean Energy Investment strategy[24], the European Grids Package[25], and the Net-Zero Industry Act[26], the 2040 framework aims to provide the predictability needed to accelerate energy efficiency, electrification, and investment in clean technologies across buildings, transport, industry, and energy networks. Industrial decarbonisation will also depend on carbon capture, hydrogen, and other innovative technologies, with private investment playing a leading role.

The EU ETS contributes to these objectives. Firstly, it aims to create a carbon price signal that rewards low-carbon investments. The ETS puts a price on CO_2 emissions. As the cost of emitting carbon rises, investments in electrification and climate-neutral production processes become more economically attractive than traditional fossil-based energy sources and high-emission production methods.

Secondly, it aims to generate revenues that finance decarbonisation. The Industrial Accelerator Act, presented in March 2026, provides a clear framework to drive investment and innovation in sectors where Europe can maintain or build global leadership. Public support will be essential to mobilise private finance to this end. The reinvestment of EU and national ETS revenues in the industrial transition as envisaged by this proposal is consistent with these objectives. In particular, this proposal increases funding for industrial decarbonisation and sustainable fuels, helping to accelerate electrification, promote clean technologies, strengthen Europe's industrial base, and create high-quality jobs.

Building on the recommendations of the Draghi report, the Commission proposes an ETS Investment Booster as an early phase of the IDB, which was announced as part of the Clean Industrial Deal. Becoming operational once the ETS legislative process has been concluded, the ETS Investment Booster will support low-carbon investments in EIIs through a predefined carbon premium. From 2031, the second phase of the IDB will use competitive tools such as

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23 Proposal for a Regulation of the European Parliament and of the Council establishing a framework of measures for the acceleration of industrial capacity and decarbonisation in strategic sectors and amending Regulations (EU) 2018/1724, (EU) 2024/1735 and (EU) 2024/3110 (COM(2026) 100 final).

24 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Clean Energy Investment Strategy (COM/2026/116 final).

25 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'European Grids Package', (COM/2025/1005 final).

26 Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (OJ L, 2024/1735, 28.6.2024, ELI: http://data.europa.eu/eli/reg/2024/1735/oj).

contracts for difference, as part of a broader objective to mobilise EUR 100 billion for industrial decarbonisation.

This proposal also extends the Innovation Fund and the Modernisation Fund. Endowed with 200 million allowances, the Innovation Fund will support innovative industrial technologies for industry and clean-tech manufacturing. The Modernisation Fund will channel the revenues resulting from the auctioning of 2,5% of the Art. 9 cap to lower-income Member States to modernise energy infrastructure, expand renewables, strengthen grids, improve energy efficiency, and support technologies such as carbon capture and storage (CCS).

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- **Legal basis**

Articles 191, 192 and 193 of the Treaty on the Functioning of the European Union empower the EU to act to preserve, protect and improve the quality of the environment; protect human health; and promote measures at the international level to deal with regional or worldwide environmental problems. The legal basis of this initiative is in Article 192(1), as this initiative is action being taken to combat climate change and to serve the other environmental objectives specified in Article 191. The ETS has been operating on this legal basis since 2003. The European Parliament and the Council have adopted all amendments to the ETS Directive on this legal basis.

- **Subsidiarity (for non-exclusive competence)**

Climate change is a trans-boundary problem and both international and EU action can effectively complement and reinforce regional, national and local action. Adjusting the ETS to the 2040 target for EU GHG reductions will affect many sectors across the EU economy. Coordinated action at EU level is therefore indispensable and has a much bigger chance of leading to the necessary transformation, acting as a strong driver for cost-effective change and upward convergence. Furthermore, many of the policy aspects assessed in this initiative have an important single market dimension, in particular the options related to the carbon leakage protection and the low-carbon funding mechanisms. EU action can also inspire and promote the development of other market-based measures.

As a carbon market, the ETS incentivises emission reductions made by cost-effective solutions first across the activities it covers, achieving greater efficiency by virtue of its scale. Implementing a similar measure nationally would result in smaller, fragmented carbon markets, risking distortions of competition and likely leading to higher overall abatement costs. The same logic holds for extending carbon pricing to cover new sectors.

- **Proportionality**

The analysis of the impact assessment accompanying this proposal show that the proposal complies with the proportionality principle. This is because it does not go beyond what is necessary in order to achieve the objectives of implementing the EU's GHG emission reduction target for 2040 in a cost-effective manner while at the same time ensuring the proper functioning of the single market and the competitiveness of the ETS sectors.

The European Parliament and the Council have endorsed an overall economy-wide and domestic reduction in GHG emissions of 90% compared with 1990 levels by 2040, with a possibility to use a limited quantity of high-quality international credits to make an 'adequate contribution' towards the 2040 target, starting in 2036. This proposal covers a large part of these GHG emissions and revises the ETS Directive in order to achieve this objective.

- **Choice of the instrument**

The objectives of this proposal can be best pursued through a directive. This is the most appropriate legal instrument to make amendments to the existing ETS Directive.

A directive requires Member States to achieve the objectives and incorporate the measures into their national substantive and procedural law systems. This approach gives the Member States more freedom when implementing an EU measure than does a regulation, in that Member States are left the choice of the most appropriate means of implementing the measures in the directive. This allows Member States to ensure that the amended rules are consistent with their existing substantive and procedural legal framework implementing the EU ETS, in particular regulating permits for installations as well as enforcement measures and penalties.

A directive is also the appropriate instrument to amend the MSR Decision because the review of this legal instrument is closely related to the effects on market stability of the adjustments proposed to the EU ETS.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex post evaluations / fitness checks of existing legislation**

The evaluation of the ETS Directive and the MSR Decision (see Annex 15 to the impact assessment) concluded that the EU ETS is very much aligned with the EU's broader climate policies, with ETS sectors making a greater contribution to the achievement of the EU's GHG reduction target for 2030 as it was more economically *efficient* for those sectors to do so than for non-ETS sectors. There was evidence to suggest that the EU ETS has been *effective* in driving the overall emission reduction trend observed in the EU.

During the evaluation period, total emissions from stationary installations declined significantly, consistent with and exceeding the trajectory required to meet the target of achieving a 43% reduction compared with 2005 levels by 2030 set by the 2018 revision of the ETS Directive. The strengthened CO_2 price signal under Phase IV (2021-2030) has likely incentivised higher levels of overall abatement as reforms were carried out to address the structural imbalance in the demand and supply of allowances that previously undermined the performance of the EU ETS in Phase III (2013-2020). The uptake of abatement options is likely to have been higher in the power sector than in industrial sectors. In part, this is due to the further complementary measures that have been put in place to support the decarbonisation of electricity generation across the EU, as well the absence of free allocation, which would have reduced the impact of carbon price for industrial emitters.

The introduction of the MSR has made the EU ETS considerably more consistent with the wider policy framework (i.e. **external coherence**). It has addressed the long-criticised 'waterbed effect' by allowing allowance supply to respond to changes in demand, including those induced by overlapping policies like those set out in the Renewable Energy Directive[27] and the Energy Efficiency Directive[28]. In recent years, reforms of the EU ETS, such as reforms of free allocation, have started to address issues previously identified with regard to the consistency between different design elements (i.e. **internal coherence**). For example, the

[27] Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 (OJ L, 2023/2413, 31.10.2023, ELI: http://data.europa.eu/eli/dir/2023/2413/oj).

[28] Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955 (recast) (OJ L 231, 20.9.2023, pp. 1–111, ELI: http://data.europa.eu/eli/dir/2023/1791/oj).

setting of more ambitious benchmarks for the provision of free allocation helps to enhance the impact of the CO_2 price signal to provide incentives for decarbonisation while striking a balance in protecting industry from the risk of carbon leakage. Evidence from the literature supports the argument that the implementation of the revised ETS Directive since 2018 has provided considerable EU added value to Member States and it has likely resulted in more cost-effective mitigation than would have been provided if action had been taken only at the national level.

Overall, the evaluation confirms that the ETS has successfully achieved its objectives so far and that it has been a key instrument in delivering on the EU climate objectives. However, the evaluation also points to areas of potential improvement, such as better balancing the need to prevent carbon leakage with ensuring continued incentives for investments in decarbonisation, ensuring a more efficient monitoring, reporting, verification and accreditation (MRVA) system, and strengthening the security measures for the Union Registry.

The MSR was adopted in 2015 to reduce excess allowances in the EU ETS that built up over Phases II (2008-2012) and III (2013-2020) and to mitigate the build-up of new demand-supply imbalances in order to sustainably strengthen the resilience of the EU ETS. The evaluation showed that this instrument was effective in reducing the historical demand-supply imbalance in the allowance market. It was also effective in mitigating price shocks resulting from the COVID-19 pandemic and the energy price crisis. Most notably, the MSR credibly signalled the commitment of the EU to the EU ETS, thereby boosting confidence in the market.

- **Stakeholder consultations**

The Commission consulted national, regional and local public authorities; private-sector stakeholders including individual companies and business associations; non-governmental and environmental organisations; academic and research institutions; trade unions; and individuals, at various steps during the development of this proposal.

The revision of the ETS Directive and the MSR Decision builds upon the feedback gathered as part of a back-to-back evaluation of the current framework and an impact assessment for the review. The main objective of the consultation was to gather stakeholder views on options for provisions on carbon leakage, carbon removals, the aviation and maritime sectors, waste management processes, non-permanent CCU, thermal input thresholds, linking with other carbon markets, and the MSR. The consultation further assessed the use of revenues and low-carbon support mechanisms. The Commission also gathered inputs on possible simplification measures.

The Commission organised an online public consultation with a questionnaire on each of the areas under evaluation and review, receiving a total of 540 responses[29] while collecting more than 400 position papers and feedback inputs to the call for evidence from across different stakeholder groups. In addition, targeted interviews were conducted and the Commission participated in multiple (virtual) bilateral and multilateral stakeholder meetings and conferences to discuss the revision of the EU ETS, including with companies and business associations across different sectors, trade unions, non-governmental organisations and public authorities of Member States. To support the revision in relation to maritime-related topics, a joint meeting of the European Sustainable Shipping Forum sub-group on the implementation of MRV and ETS Maritime (ESSF) and the Climate Change Expert Group (CCEG Maritime)

[29] The details of the public consultation can be found at: EU emissions trading system for maritime, aviation and stationary installations, and market stability reserve – review.

was held. Finally, the Commission also instructed contractors[30] to collect views and inputs on the implementation of MRVA rules for stationary installations and maritime operators through detailed questionnaires.

In parallel, the Commission also organised a targeted workshop on the EU ETS with over 50 representatives from stationary installations across the EU on 29 January 2026. It focused on experiences with practical implementation and identification of areas for simplification and streamlining of compliance processes and requirements[31]. Finally, the Commission also organised a high-level stakeholder roundtable on the review of the EU ETS on 12 May 2026. The round table complemented the public consultation and gathered additional input on the policy priorities to guide the upcoming review of the EU ETS and the MSR for the 2031-2040 period and the complementary instruments needed to make decarbonisation a driver of EU competitiveness and resilience.

The results of the consultation activities are reported in the impact assessment and evaluation report accompanying this proposal and have been taken into account for the current proposal to the extent possible.

In general, the public consultations showed broad support for the EU ETS as a policy instrument. Stakeholders generally support ensuring consistency between the EU ETS and the 2040 climate target set in the European Climate Law, in order to continue to contribute to emission reductions in the most cost-effective and economically efficient manner while preserving competitiveness. To achieve consistency with the 2040 target, many stakeholders consider the downward adjustment of the linear reduction factor important to contain carbon prices and improve market predictability. At the same time, many also consider a robust price signal important for investment certainty. Both objectives are reflected in this proposal.

To address the risk of carbon leakage for sectors not covered by CBAM, there is overall broad support for continuing free allocation, in particular among industry stakeholders. Making continued free allocation conditional on decarbonisation investments is mainly supported by the energy sector and civil society. The proposal combines the continuation of free allocation with making a part conditional on decarbonisation investments to strike a balance between preventing carbon leakage and strengthening incentives to invest in decarbonisation measures. In addition, a large majority of stakeholders support the proposed continuation of indirect cost compensation beyond 2030 to address the risk of carbon leakage from carbon costs passed on in electricity prices. Only some respondents from civil society opposed continuing indirect cost compensation.

On industrial decarbonisation support, a large majority of stakeholders across all stakeholder groups support the creation of an IDB to support industrial decarbonisation efforts, with a toolbox of funding instruments to tailor support to changing priorities and needs. This is duly reflected in the proposal. The continuation of the Innovation Fund and Modernisation Fund is also generally welcomed by stakeholders. This is reflected in the proposal by continuing support for investments in modernising energy systems and energy efficiency under the Modernisation Fund, while improving and simplifying some aspects of the Innovation Fund without making fundamental changes to its operation and objectives.

As regards carbon removals, the proposal reflects the view expressed by a large majority of stakeholders that domestic permanent carbon removals should be included in the EU ETS, with safeguards to ensure that these do not deter necessary emission reduction. Only some

[30] Ricardo Nederland B.V; Viegand Maagøe A/S and SQ Consult.
[31] European Commission: Reality check – Commission takes stock of ETS implementation with stationary installations 2 February 2026.

respondents from the private sector and from civil society argued for, respectively, also including temporary carbon removals or not including any carbon removals. Opinions on the specific arrangements for integration through a central EU public authority were mixed. The proposal includes this approach to provide both certainty for ETS sectors on the gross emission space available and predictability of demand for carbon removals, benefiting the carbon removal industry. This would support enhanced liquidity in the market and the uptake of such technologies, while ensuring environmental integrity and reducing mitigation deterrence with a limited integration of CCS-based domestic permanent Carbon Removals and Carbon Farming (CRCF)-certified removals, and with low administrative cost for ETS sectors that keep trading only EU allowances (EUAs).

Across stakeholder groups, the MSR is widely considered as having been effective in addressing the surplus on the market. However, a majority of stakeholders, mainly from industry and energy sectors, support changes to its parameters to strengthen price predictability and increase liquidity in view of the expected future tightening of the market, while some stakeholders from civil society generally prefer maintaining the current approach. The changes most frequently proposed were ending the invalidation rule and dynamically adjusting the parameters to reflect the market. These changes are duly reflected in this proposal and the targeted proposal to amend the MSR of April 2026, which stops the invalidation mechanism, allowing allowances in the reserve above 400 million to be kept as a buffer that can support market stability.

With regard to aviation, there is broad support for strengthening its contribution to decarbonisation, and a majority of stakeholders from both business sectors and civil society consider that the current approach to international flights outside Europe does not adequately address emissions from those flights. The proposal contributes to addressing this by applying an effective carbon price also to a part of the EU's fair share of international aviation emissions, in a way that is consistent with the scope of application of ReFuelEU Aviation. Stakeholders from the business and public sectors also identified increased support for sustainable aviation fuel (SAF) as a key priority. The proposal duly reflects this by increasing ETS support for SAF uptake, while ensuring that Member States still receive ETS revenues to finance additional decarbonisation measures.

On maritime transport, stakeholders broadly agreed that ETS inclusion successfully drives decarbonisation, while identifying opportunities to improve interaction with international measures, enhance competitiveness, include smaller vessels, and simplify the rules. The proposal contributes to these objectives by taking measures to reduce the risk of evasion, and by adapting the review clause to notably address the risk of double payments taking into consideration future IMO global measures. The proposal also introduces an ETS-funded mechanism to support the uptake of sustainable fuels and clean propulsion technologies. A targeted scope extension to certain categories of smaller vessels is proposed, reflecting the needed balance between environmental benefits and implementation costs. The proposal includes a time-limited extension of the derogations that are necessary for connectivity and socio-economic reasons. This is to accompanied by a MRV Maritime Regulation Proposal to improve and simplify the implemenation of the system.

With regard to the waste management sector, a majority of stakeholders support the inclusion of municipal waste incineration in the EU ETS while excluding hazardous waste incineration, as reflected in this proposal, to incentivise emission reduction, the circular economy, and the uptake of carbon removals and CCU. This was generally supported by stakeholders from industry and civil society, with the exception of stakeholders from the waste incineration sector.

A majority of stakeholders is in favour of incentivising CCU by adjusting the surrender obligation for emissions captured and used in products without permanent storage, mainly obtaining support from the energy sector and manufacturing industry. Opinions are more mixed on moving the surrender obligation fully downstream, with some stakeholders highlighting the need for regulatory consistency for e-fuels. The proposal reflects these considerations by implementing hybrid downstream and midstream accounting to incentivise CCU in upstream installations and the use of CCU-based carbon in downstream products.

- **Collection and use of expertise**

This proposal builds upon evidence gathered in the impact assessment for the previous ETS revision[32] concluded in 2023, the impact assessment accompanying the 2040 Climate Target Communication and Proposal[33] and any relevant evidence compiled in other concurrent initiatives. It builds on emissions data and experiences from the implementation of the EU monitoring, reporting and verification systems.

This proposal makes use of a collection of integrated modelling tools covering the entire GHG emissions of the EU economy. These tools are used to produce a set of scenarios reflecting self-consistent policy options aligned with the Union's 2040 climate target.

In addition, the Commission has used the growing body of peer-reviewed empirical research on the EU ETS, together with several support contracts. Additional support work was carried out by Viegand Maagoe and SQ Consult for the evaluation of the MRVA system. For the maritime and aviation sectors, sector-specific studies were carried out by Ricardo[34].

- **Impact assessment**

This proposal is accompanied by an impact assessment report, a draft of which was submitted to the Regulatory Scrutiny Board (RSB) on 23 March 2026. The RSB issued a positive opinion with reservations on 15 April 2026[35]. The RSB highlighted five key shortcomings in the draft. First, it considered that the costs and benefits of the EU ETS during the evaluation period, including the distribution of costs, carbon price impacts, and effects of free allowances on emissions reductions and investments had been insufficiently quantified. Second, the problem definition lacked clarity, and its objectives had not been framed in SMART (Specific, Measurable, Achievable, Relevant, Time-bound) terms. Third, the baseline scenario was unclear, particularly as regards the way it aligns with the 2040 Climate Target impact assessment. Fourth, the rationale for combining measures into policy options needed strengthening, with further analysis of competitiveness, affordability, and interactions between proposals required. Fifth, the cost-benefit comparisons of policy options lack detail, hindering a robust assessment of effectiveness and efficiency. The impact assessment report was adjusted to address the RSB's comments.

[32] SWD(2021) 601.
[33] SWD(2024) 63.
[34] Ricardo, 'Support for the 2026 review of the ETS directive for maritime, report prepared for DG CLIMA, publication upcoming', (2026); Ricardo et al., 'Supporting study for the implementation of the ETS Directive and MRV requirements for maritime transport', (2024); and more specifically 'MRV maritime evaluation support' part (2026): publication upcoming; Ricardo, 'Opportunities of the Green Transition for the EU Maritime Industry and Value Chain', (2026) publication upcoming. Ricardo, 'Support for the review by the Commission concerning the implementation of ICAO's CORSIA, and for Commission reports on certain types of flights, social impacts, and air connectivity of islands, remote territories and Iceland', prepared for DG CLIMA, (2025) publication forthcoming.
[35] ARES(2026)3999719.

The evaluation was strengthened to show the different developments, and the impact of carbon price on industry and the power sector. Further evidence was added of fuel switching and the role of the ETS in reducing coal use, and on abatement costs for the main sectors, marginal abatement costs and the link to ETS price, and the results from an additional literature review on the costs and benefits attributable to the ETS was included. Additional information was included, from literature and stakeholders, on the competitiveness impacts of the ETS. The evaluation was further developed to include more information on the emission reductions and the cost pass-through for the different sectors.

Regarding the impact assessment, the problem definition was clarified, and the objectives that had not been framed in SMART terms were reframed in those terms (SO1.1.2, SO2.1.2, SO.1.1.3 and SO1.3.1). The problem drivers were quantified where possible and further qualified where not. Explanations were added on the key differences between the baseline scenario, the 85% target run, and the proposal on the EU climate target for 2040. More information was provided on investment needs and their trajectory, on the impacts of options for the cap (CAP3 vs CAP1), differentiated between energy intensive and other industry sectors, as well on the technologies required their technical readiness levels. The key trade-offs between the options and the most significant measures that would drive the overall impact for each of the three policy options were identified. The report was accompanied by more information on key modelling assumptions and improved accessibility for policymakers through streamlining of repetitive or unsupported claims. In addition, Appendix IV of the evaluation was included with an overview table of the costs and benefits identified in it. Finally, smaller inconsistencies identified by the RSB across the documents were corrected.

Sections 5 to 7 of the accompanying impact assessment explain the policy alternatives examined, compare them and explain why the final proposal was considered to be the best policy choice. In Sections 6 and 7 and in Annex 3, an explanation of the main economic, social and environmental impacts of the preferred option, and who would be affected and how, is set out, together with quantitative estimates of benefits and costs where possible. Regarding the option chosen for the ETS cap, the final policy proposal deviates from the options assessed in the impact assessment.. The impacts are explained in Section 6.2.3.1. and Annex 8-1 on the cap.

As outlined in the stakeholder consultations section above, the open public consultation also received more than 400 submissions in response to the call for evidence, including both position papers and feedback, provided by different stakeholder groups. This is further explained in Annex 2 of the accompanying impact assessment.

The impact assessment includes the consistency check of Article 6(4) of the European Climate Law, which requires the Commission to assess the consistency of any EU draft measure or legislative proposal with the Climate Law's objectives, such as the EU's climate-neutrality objective. The impact assessment focuses on the analysis of the climate impacts of the measures. It is based on the best available science, uses two economic modelling tools, and examines the cost-efficiency of each policy option. The assessment compares the impacts of the measures against a baseline scenario and tests sensitivity to key assumptions. The legislative proposal is fully aligned with the climate-neutrality objective set out in the European Climate Law, as the alignment of the ETS towards that objective and the intermediate 2040 target is its core goal. Where the measures introduce uncertainty about reaching the net climate contribution of the EU ETS (carbon removals integration with a pre-increase of the cap) or potentially create loopholes in the accounting of emissions (downstream accounting of CCU), the level of risk is assessed and justified by reference to the achievement of the climate objectives more broadly, and the use of mitigating tools. As regards removals, the measures are justified to achieve the scale-up of removals and avoid carbon leakage, and risks are mitigated by providing a sufficient budget for the purchase of removals and a review clause. As regards CCU, the risks are justified to incentivise CCU, while the proposal introduces mitigation measures in case of loopholes.

- **Regulatory fitness and simplification**

Since the revision of the ETS Directive in 2018, a number of simplifications have been introduced. Article 27a was added to the ETS Directive, allowing Member States to exclude installations emitting less than 2 500 tCO_2e per year. In addition, a number of simplifications, and clarifications have been made through amendments to the Monitoring and Reporting Regulation (Commission Implementing Regulation 2018/2066)[36], and standardised methodologies and tools have been developed to facilitate implementation. These measures are discussed further in the evaluation report accompanying this impact assessment, while a number of possible measures for additional streamlining and simplification have been proposed (see Annex 15, Section 9.4.4.2).

Several of the measures in this proposal covering emissions from stationary installations generally do not involve simplification, since they are considering expanding the scope of the EU ETS. However, they entail simplification more broadly, as EU-wide climate action should prevent a piecemeal approach wherein national or subnational measures add complexity to the single market. In addition, the carbon-leakage prevention measures proposed simplify the provision of free allocation by not updating the carbon-leakage list for Phase V (2031-2040), thereby eliminating administrative burden for operators. The proposed option of expanding conditionality in free allocation would involve an increase in administrative effort, which has to be weighed against the environmental benefits of conditionality and the value of free allocation (see Section 6.2.1.6 of the impact assessment). The impact assessment (see Annex 12) considers the case for including a discussion of whether to include more small installations in the EU ETS by lowering the 20 MW thermal capacity threshold. However, in line with the impact assessment, this proposal excludes such an expansion on the basis that it would not be proportionate, since most of the relevant emissions will be covered by EU ETS2.

The package introduces incremental improvements through simplification initiatives with the aim of implementing the system in a harmonised and robust way, minimising existing duplications and delivering efficiency gains in respect of the MRV Maritime Regulation. This is in line with the evaluation (see Annex 15, Section 8.5 of the accompanying impact assessment), which concluded that the incremental improvements proposed would be better than a structural overhaul of the MRV system, considering that the MRV system functions as a robust framework, and has successfully handled the changes stemming from the 2023 revision without compromising overall data quality or usability.

Policy measure SI1 for maritime ‘Simplification, and targeted enhancement measures’ includes specific provisions to simplify the MRV Maritime system which would enable shipping companies to exploit untapped synergies, minimise undue burden, and ultimately reduce administrative compliance costs. Among other things, the measure would ensure that one entity is responsible for compliance in respect of the emissions of a given ship under the ETS/MRV Maritime and the FuelEU Maritime systems and that the monitoring-and-reporting-only-once principle is fully implemented through a shared common MRV

[36] Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 601/2012 (OJ L 334, 31.12.2018, pp. 1–93, ELI: http://data.europa.eu/eli/reg_impl/2018/2066/oj).

compliance cycle. The accompanying impact assessment estimates that simplification elements for the maritime sector would mean annual savings of between 10% and 20% of current annual MRV administrative compliance costs for shipping companies.

Simplification is also proposed for aviation, in particular for smaller operators, in respect of whom the definition of commercial status is removed, and replaced by a straightforward emissions threshold that applies to all operators equally. Newly covered operators, and the increased number of existing operators with low activity, due to an increase of the relevant threshold, can rely on simplified monitoring and reporting and a waiver of verification. Excluding operators with a very low EU ETS surrender obligation ensures that the administrative burden on airlines and administering authorities remains limited, without compromising environmental ambition.

- **Fundamental rights**

The proposal respects fundamental rights and, in particular, observes the principles of the Charter of Fundamental Rights of the European Union. In particular, it contributes to the objective of a high level of environmental protection in accordance with the principle of sustainable development as laid down in Article 37 of the Charter[37].

4. BUDGETARY IMPLICATIONS

The budgetary implications of the initiative and the human and administrative resources required are set out in the financial statement showing the budgetary implications.

5. OTHER ELEMENTS

- **Implementation plans and monitoring, evaluation and reporting arrangements**

The Commission will continue to monitor and evaluate the functioning of the ETS in its annual Carbon Market Report, as provided under Article 10(5) of the ETS Directive. The Carbon Market Report will cover the impacts of the current revision of the ETS. It relies on the analysis of the evaluation of progress on the application of the ETS Directive that is regulated in Article 21 of the ETS Directive, and which requires Member States to report to the Commission on issues including the allocation of allowances, operation of the Registry, application of monitoring and reporting, verification and accreditation and issues relating to compliance. The provisions on the annual Carbon Market Report and Member States reporting also apply to the sectors to which the ETS has been extended. The MRV data obtained through the regulation of the new sectors will be a key source of information for the Commission to evaluate progress in the sectors concerned.

With respect to maritime transport, the Commission will rely on data collected through the EU maritime transport MRV system and on analysis from the annual report on GHG emissions from maritime transport, which provides aggregated and explained results. The integrated governance and monitoring process under the Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate action[38] is also expected to ensure that climate

[37] OJ C 326, 26.10.2012, p. 391.

[38] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, pp. 1–77, ELI: http://data.europa.eu/eli/reg/2018/1999/oj).

and energy-related actions at European, regional, national and local level, including the ETS, contribute to EU climate neutrality and the Energy Union's objectives. Several market analysts closely follow various aspects of the carbon market, and the Commission will continue to monitor their work.

The Commission is in regular contact with stakeholders and is therefore alert to their views and concerns about the functioning of the ETS. ETS-related matters are discussed in a dedicated forum, the Climate Change Expert Group (CCEG), which brings together Member States' competent authorities, industry associations and NGOs, and the Commission. In its different formations, the CCEG discusses the implementation of free allocation, auctioning and issues related to the functioning of the Union Registry, among other aspects. In addition, the ETS Compliance Forum provides the competent authorities of all ETS countries (the 27 Member States, Norway, Iceland and Liechtenstein) with a platform for sharing information, learning and experience, leading to effective implementation of the ETS. The forum organises targeted events, such as the Compliance Forum Conference, which is held annually with the aim of sharing experiences and facilitating dialogue among Member States' competent authorities, as well as task forces dedicated to specific topics and training events. National accreditation bodies and verifiers are sometimes invited to participate in the activities of the ETS Compliance Forum. Furthermore, the Technical Working Group on ETS MRVA brings together representatives of Member States' competent authorities to share experiences and suggestions concerning the effective and efficient implementation of Commission Implementing Regulation (EU) No 2018/2066 (Monitoring and Reporting Regulation) and Commission Implementing Regulation (EU) No. 2018/2067 (Accreditation and Verification Regulation)[39] and to discuss potential updates and improvements to the ETS MRVA framework.

- **Explanatory documents (for directives)**

Member States have undertaken to send the notification of their transposition measures with one or more documents explaining how the components of a directive and the corresponding parts of national transposition instruments relate to each other, in justified cases. This is considered to be justified for this proposal, since targeted amendments will be required to be made to national laws, and these will have to be identified, as will those provisions in respect of which transposition was not considered necessary.

- **Detailed explanation of the specific provisions of the proposal**

The main elements of the ETS Directive which have been amended are the following:

- **Cap:** to align the system with the Union's 2040 emission reduction target of -90%, it is proposed to amend Article 9 of the ETS Directive in order to adjust the EU ETS trajectory from 2031 onwards. This change would allow a slower annual decline and continued issuance of allowances into the 2040s.
- **International credits**: it is proposed to consider the planned purchase of high-integrity international credits from 2036, reducing the need for domestic abatement of up to 5 percentage points in 2040 while ensuring cost-efficiency and alignment with the Paris Agreement. It is proposed to lower the EU ETS cap to reflect this adjustment, with a reduced LRF from 2036 aligned with

[39] Commission Implementing Regulation (EU) 2018/2067 of 19 December 2018 on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council (OJ L 334, 31.12.2018, pp. 94–134, ELI: http://data.europa.eu/eli/reg_impl/2018/2067/oj).

reaching an ambition of 85% EU domestic emission reductions by 2040 and set aside allowances to fund the purchase of the amount of international credits (260 Mt) corresponding to the EU ETS ambition reduction. A fallback mechanism is proposed to preserve the environmental integrity by reverting to a trajectory for ETS sectors aligned with an EU domestic reduction of 90% by 2040 in the event high-quality and high-integrity, cost-effective international credits are not available, subject to the report from the Commission on the development of a high-quality and high-integrity international credit market, taking into account the criteria set out in Regulation 2021/1119/EU, and the contribution of these credits to the climate ambition of the ETS sectors (see proposed new Article 9b).

- **Carbon removals:** it is proposed to introduce in the ETS Directive a new Article 9c incorporating permanent carbon removals into the EU ETS by increasing the cap by the number of allowances corresponding to the CRCF domestic permanent biogenic emissions capture with carbon storage (BioCCS) and direct air capture with carbon storage (DACCS) removal units (1:1) that the Commission is mandated to purchase. These newly created allowances would be assigned for the purchase of the removals. It is proposed to allocate additional allowances to the Commission to address the price gap between removals and allowances. The net EU ETS target would be calculated as the gross emissions (corresponding to the total amount of allowances) minus the amount removals planned to be purchased. To facilitate operator's use of own removals, it is proposed to allow operators, shipping companies and aircraft operators, if relevant, to compensate their own fossil emissions with CRCF-certified BioCCS removals that they themselves generate (Article 14(1a)) This compensation mechanism would not go beyond zero – it cannot generate negative emissions and the obtention of EUAs – and requires an adjustment mechanism to the allowances assigned for the purchase of carbon removals and to the carbon removals that are to be purchased, to prevent the total emission space from increasing beyond the limit implied by the integration through the purchasing programme.

- **Industrial Decarbonisation Bank:** as of 2028, it is proposed to establish the Industrial Decarbonisation Bank as an EU-level entity to support the scaling-up and deployment of technologies, processes and techniques that directly reduce emissions in stationary installations covered by Annex I and that can, as such, also generate permanent carbon removals. The Bank will begin to operate in two phases (new Article 10cc). First, in the period 2028–2031, an 'Investment Booster' will reserve 400 million allowances to provide fixed carbon premia using a 'first in, first served' system to fast-track investments on the basis of speed (new Article 10cd). A dedicated share will be reserved for lower-income Member States to ensure solidarity. Support will be conditional on compliance with strict completion deadlines and performance will be guaranteed through the issuance of completion bonds. Payments will be linked to independently verified emissions avoidance and may be delivered in allowances. Second, from 2031 onwards, the Bank will support projects, mainly through competitive bidding procedures that award Carbon Contracts for Difference or carbon premiums, thereby providing long-term revenue stability and de-risking investments (new Article 10ce). The proposal provides for bid bonds and completion bonds to ensure serious intent and timely delivery, allows budgetary commitments to be broken down into annual instalments, and includes provisions on repayments and revenues as external assigned revenue to the Bank. Synergies with the European Competitiveness Fund will be strengthened by the possibility of awarding a ‘Competitiveness Seal’ to projects assessed by the Bank.

- **Innovation Fund:** the proposal updates the legal basis of the Innovation Fund to ensure continued, predictable support for bringing innovation to market and scaling up low- and zero-carbon technologies that contribute significantly to the decarbonisation of EU ETS sectors (Article 10cb). The proposal also strengthens implementation principles, including project development and technical assistance for Member States with low participation, introduces measures to deter speculative applications, and enhances transparency through annual public reporting. Transitional rules are provided to ensure the continued application of Article 10a(8) up to 2030.

- **Modernisation Fund:** the proposal adjusts the Modernisation Fund (amended Article 10d) to better align with strengthened climate ambition and fairness objectives, by updating eligibility and distribution indicators using the latest available data. It extends the eligible investment areas to include electrification and industrial decarbonisation, including CCS/CCU, while continuing to prohibit support for fossil fuel-based energy generation. The proposal also channels allowances redistributed for solidarity purposes through the Modernisation Fund to maximise impact and enables Member States to voluntarily transfer additional allowances from their auction volumes to increase resources of the Fund. In addition, an extra share of the EU ETS cap is allocated for beneficiary Member States to support investments via the Industrial Decarbonisation Bank, reinforcing industrial decarbonisation in lower-income Member States.

- **Auction revenues:** the proposal introduces targeted reforms to ensure revenues are used more effectively, transparently, and in full alignment with the EU’s climate objectives (amended Article 10(3)). It is proposed to define clear priority areas for spending, reflecting the principle that ETS sectors paying the carbon price should be supported with the revenues the ETS raises and therefore focusing on high-impact sectors where ETS revenues can deliver the greatest emissions reductions and co-benefits. These priorities include EU climate funds, clean energies and grids, low-carbon transport (especially for maritime and aviation), industrial decarbonisation (including electrification, CCS and clean tech) , waste management decarbonisation, circularity, and supporting research and innovation in these areas. To ensure focused and high-impact spending, Member States are required by the proposal to allocate at least 50% of ETS revenues to these priority areas. This binding minimum will help correct the current imbalance in spending, where critical sectors receive disproportionately low funding despite their significant role in achieving emission reductions. The proposal will ensure full alignment with climate neutrality by prohibiting investments that undermine the EU’s long-term climate goals. This includes spending on measures that create or prolong dependencies on carbon-intensive technologies, with fossil fuel lock-in serving as a key example of such misalignment. It is also proposed to strengthen visibility requirements to ensure that the public and stakeholders can clearly identify how ETS revenues are used (amended Article 30m) by obliging Member States to publicly communicate the origin of ETS-funded measures through multiple channels, such as project documentation and public displays. The use of the standardised EU label ('(Co-)funded by the European Union Emissions Trading System') will be a key tool to achieve this visibility. The priority areas for spending include the top-up of the support mechanisms in the Directive for reducing climate impacts from ETS sectors. It is already the case that Member States may decide not to auction allowances for certain purposes, and, in such cases, the quantities not auctioned should be used to calculate the amount of own resources based on emission trading, in line with the Commission proposal on the system of own resources (COM(2025)574, recital 14). These reforms will be complemented by amendments to the upcoming Governance Regulation[40], which will require Member States to integrate their planned use of ETS auction revenues into their NECPs. This ex-ante planning obligation will ensure that spending is strategically aligned with national and EU-wide climate targets before revenues are allocated, together with better monitoring, public scrutiny, and visibility.

- **Aviation emissions:** it is proposed to increase the coverage of effective carbon pricing by applying the ETS as appropriate to the EU's fair share of certain extra-European departing flights (amended Article 28a(1) and Annex I) and to business flights (amended Article 3, points (o), (p) and, (am), Article 28a(4) and, Annex I, points (j) and (k)). This is accompanied by commensurate increases in the cap (amended Article 28a(1)). Support for multilateral action is continued by allowing a reduction of the ETS surrender obligation with costs for the emissions covered by CORSIA (amended Article 12(3) point (b)). It is proposed that implementation of the CORSIA unit cancellation be extended until 2035 (amended Article 12(9). Allowances from the increased coverage are recycled to drive investment in reducing aviation's climate impacts, through the uptake of sustainable aviation fuels and scalable decarbonisation solutions, and the cost-effective reduction of climate impacts from contrails for flights covered by the ETS (amended Article 3c(6)). The proposal includes simplification provisions for reporting (amended Article 28a(4)) and for claiming ETS-financed support for aviation decarbonisation (amended Article 3c(6)).

- **Maritime transport emissions**: the proposal enhances the effectiveness of the current system (i) by establishing a Sustainable Maritime Alternative Propulsion (SMAP) mechanism (new Article 3gaa), which aims to recycle further EU ETS revenues to support the decarbonisation of the maritime sector; (ii) by reinforcing safeguards against the risk of evasion by containerships and vessels engaged in or supporting offshore operations (amended Article 3ga(1) and Article 3), and ongoing monitoring of such risk; Considering that the large-scale deployment of emission reduction solutions related to ice-class vessels and fleets servicing routes subject to derogations until 31 December 2030 remains constrained, it is proposed that the duration of certain

[40] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, pp. 1–77, ELI: http://data.europa.eu/eli/reg/2018/1999/oj).

derogations be extended until 31 December 2035 (amended Article 12(3-e) to (3-b)). The proposal also extends until 31 December 2038 the temporary redistribution mechanism established in Article 3ga(3), second subparagraph. The proposal reinforces the level-playing field through a targeted extension of the scope of the EU ETS to certain categories of small vessels (below 5 000 gross tonnage but not below 400 gross tonnage) (amended Annex I). This kind of targeted extension requires the cap to be increased (amended Article 9). Since the EU ETS for maritime transport interacts with global measures under development at the IMO, the proposal provides for a review clause that refers to a possibility for a measure to avoid double payments (Article 3gg). The proposal provides also for a certain amount of allowances to be reserved and allocated to support least developed countries and small island developing countries (new Article 3gab).

- **'ETS as a service':** to support global climate action and facilitate the pricing GHG emissions in non-EU countries, it is proposed to establish the 'ETS as a service' mechanism, to provide support to non-EU countries in respect of emissions not already subject to surrender obligations under the EU ETS (new Article 25b).

- **Risk of carbon leakage, free allocation and benchmarks post 2031:** it is proposed to extend the current instruments (free allocation, carbon leakage list) to the next period. The proposal extends the validity of the transitional measures under Article 10b(1) to support certain EIIs deemed to be exposed to carbon leakage until 2040. The proposal also sets rules on free allocation in the EU ETS for stationary installations for the five-year periods referred to in Article 11 of the ETS Directive until 2040, adjusting the maximum update rate for the benchmarks in Article 10a(2) to reflect the actual decarbonisation pathway of industrial sectors. For the event that demand for free allowances triggers the need to apply a uniform cross-sectoral correction factor before 2040, the buffer is increased to 4 % of the total quantity of allowances. The proposal expands the existing approach on conditionality for district heating, and conditions all free allocation in the EU ETS as of the five-year period for free allocation starting on 1 January 2031, upon establishment of a plan to invest in decarbonisation in the EU (thereby enhancing homegrown production of decarbonised and low carbon products) and implementation of decarbonisation investments leading to significant emissions reduction. Concretely, 80 % of the amount of free allocation in each five-year period will be allocated annually upon submission of the plan to invest in decarbonisation in the EU, including an investment and emission reduction plan to reduce overall climate impacts that is verified by ETS verifiers and approved by the competent authority. To further incentivise industrial investment within the Union, operators are required to return the allowances received under Article 10a(3c) first subparagraph, if the operator relocates or otherwise transfers its relevant acitivities outside of the Union. The remaining 20 % of the amount of free allocation for the period will be allocated only upon verification that the decarbonisation investments have been successfully implemented, and that the corresponding significant emission reduction has been achieved, by the end of the five-year period. Concerning CBAM sectors, it is proposed that 15% of the free allocation phased out due to the CBAM factor be reintroduced, starting in 2028, to reduce the speed at which CBAM is phased-in and mitigate the remaining carbon leakage risk. This will be achieved by reducing and delaying the phase-out of free allocation until 2038 accordingly. Rules on the update of the benchmark values for the periods 2031-2035 and 2036-2040 are also included, thereby extending the principles of the current methodology into those periods.

- **New sectoral heat and fuel benchmarks:** The proposal includes an empowering provision for the Commission to establish sector-specific heat and fuel benchmarks under the delegated acts referred to under Article 10a(1).
- **Indirect cost compensation:** the proposal continues to allow Member States to grant State aid to compensate certain electro-intensive industries for part of the carbon costs passed on through the electricity market (Article 10(6)). To reduce administrative burden, the proposal integrates the reporting on indirect cost compensation into broader reporting on auction-revenue use under the Governance Regulation, with the upcoming amendment to the Governance Regulation providing the relevant legal basis.
- **Municipal waste incineration:** it is proposed to extend the current coverage of the EU ETS on waste co-incineration, to cover all non-hazardous waste incineration and co-incineration. To this end, it is proposed to add a new, separate activity in Annex I encompassing the disposal or recovery in waste incineration and co-incineration plants for non-hazardous waste. Further, it includes new definitions of 'hazardous waste' and 'municipal waste' in Article 3(ak) and Article 3(al) respectively. The extension of the EU ETS applies to emissions from non-hazardous waste incineration installations with a capacity exceeding 3 tonnes per hour as laid out in Directive 2010/75/EU. The obligation to surrender allowances in the municipal waste incineration sector will be gradually phased in over the period 2031 to 2034, with municipal waste incineration installations obliged to surrender 100% of their verified emissions as of 2034 (Article 12a). By derogation, Member States implementing appropriate equivalent measures should be eligible to a temporary national opt-out. An optional time-limited derogation is included for installations in Outermost Regions until 31 December 2035. The number of allowances added to the total Union-wide number of allowances in respect of the sector should be commensurate to the phase-in trajectory from 2031 to 2034 (Article 9). Monitoring and reporting, as well as verification and accreditation, will continue to apply (Articles 14 and 15). The monitoring and reporting rules laid out in Commission Implementing Regulation (EU) 2018/2066 will be reviewed to the extent possible for application to the municipal waste incineration sector. Waste-to-energy for district heating is eligible for free allocation under the provisions on district heating. Electricity generation has been ineligible for free allocation since 2013. The list of eligible uses of auction revenues (Article 10(3)) will be extended to support local authorities in implementing measures in line with the higher steps of the waste hierarchy. Technologies, processes and techniques that directly reduce municipal waste incineration installations' emissions, in particular carbon capture, will be eligible for support from the Industrial Decarbonisation Bank, Innovation Fund and Modernisation Fund, with a view to accelerating industrial decarbonisation. In addition, waste-to-energy district heating will be covered under the provision on free allocation to district heating installations, which are extended post-2030. To monitor methane emissions and unintended impacts of the scope

extension for a complete coverage of waste incineration and co-incineration of non-hazardous waste, monitoring and reporting, as well as verification and accreditation for landfilling of non-hazardous waste should apply by the time that the EU ETS has been fully extended to emissions from municipal waste incineration. To this end, the proposal adds disposal or recovery of non-hazardous waste in landfills as a new activity in Annex I for the purpose of monitoring, reporting and verification in accordance with Articles 14 and 15 of the ETS Directive. When developing monitoring and reporting rules, the future Best Available Techniques for Landfills should be considered to ensure regulatory consistency and environmental integrity, and they should be based on a comprehensive landfill registry to avoid circumventions and ensure effectiveness. A reporting and review clause will be included (Article 30(9)) to monitor methane emissions from landfills take account of relevant developments in terms of waste diversion contrary to the waste hierarchy, and assess the appropriateness of extending the EU ETS to emissions from landfilling. Finally, point 5 of Annex I is amended to delete the exclusion of units for the incineration of municipal waste, which should be included in the permit of an installation when the capacity threshold of the relevant activity is exceeded. Installations for the incineration of hazardous waste and units for the incineration of hazardous waste should remain excluded.

- **Non-permanent carbon capture and use (CCU):** the inclusion of waste incineration means that most stages in the life cycle of a CCU product from which the embedded carbon can be released are now subject to carbon pricing. This allows the accounting of emissions to be done at the point they are released from products instead of at point of capture, thereby avoiding the risk of double counting of emissions, and under-accounting. As a result, in those cases in which carbon dioxide is captured non-permanently, in intermediate or final products from which the carbon is expected to be re-emitted in activities already covered by the EU ETS (e.g. incinerated plastic waste), Article 12(3b) of the ETS Directive defers the obligation to surrender allowances is until the CO_2 is released in a process listed in Annex I (downstream) to the ETS Directive. The proposal empowers the Commission to establish a list of products from which carbon is expected to be re-emitted in activities already covered by the ETS. As an exception, the point of accounting for captured carbon embedded in synthetic fuels is the point at which the fuels are distributed for consumption (midstream), and not at the point at which the fuels are combusted in industrial facilities or in the transport sector. Specifically, the new point of accounting would be the point at which the fuels are distributed, for which a new activity is included in Annex I. In addition, to ensure complete coverage of all carbon dioxide emissions in the CCU chain, the scope of the ETS in Annex I should be extended to include the capture of carbon for use (currently, only capture for storage is covered), captured carbon processing, liquefaction and similar services, and the transport of captured carbon for use (currently only covering only use for storage).

- **Clarifying existing rules on scope, permitting and reporting**: it is proposed to amend the definition of ‘new entrant’ to ensure full coordination with the definition of an ‘incumbent installation’ contained in Article 2(1) of

Commission Delegated Regulation (EU) 2019/331[41], thereby aligning the definition with the practice and resolving the issue that, for 18 months, neither of the two definitions applied. The proposal clarifies the scope and definition of the activity 'Production of hydrogen (H2) and synthesis gas with a production capacity exceeding 5 tonnes per day' under Annex I to the ETS Directive. The proposal includes an empowerment for the Commission to adopt implementing acts establishing minimum horizontal rules at EU level on the granting, withdrawing and suspension of GHG emissions permits to improve the level playing field across Member States, solve implementation issues and ensure clear rules as regards the status of installations as a new entrant or incumbent installation under the EU ETS. Finally, the proposal includes amendments to clarify the legal basis and coordination between the reporting procedures under Article 10(5) and Article 21 of the ETS Directive.

- **Financing the proper functioning and management of the EU ETS**: establishing the conditions enabling the introduction of revenues dedicated to financing the proper functioning and management of the EU ETS, including the proper operation, functioning and security of the Union Registry (Article 19) and the implementation of the investment conditionality rules for free allocation.

The main elements of the MSR Decision which are amended are the following:

- In addition to the proposed removal of the invalidation mechanism ((COM(2026) 153 final[42]), this proposal introduces an integrated package of changes to make the MSR parameters dynamic over time. This is to take account of a shrinking cap and ensure that the reserve remains resilient to maintain liquidity.
- First, the upper and lower thresholds and the release amount (Article 1(5) and (6)) are proposed to evolve over time, with a fixed annual reduction of 4 % per year as from 2029. The exact amounts of these values are rounded to the nearest million and specified in Annex I to the MSR Decision.
- Second, the proposal introduces changes to the release of allowances:
  - It introduces a lower buffer from 2028 (Article 1(5)), which mirrors the logic of the upper buffer that was introduced in the 2023 revision. The current lower threshold is at 400 million and the current release rate is set at 100 million. This implies a lower buffer value of 300 million allowances. When the total number of allowances in circulation (TNAC) is between the lower threshold and the lower buffer, the amount of allowances released from the MSR is calculated as 'Lower threshold - TNAC', rather than releasing a fixed amount of 100 million under the current rules. When the TNAC is below the lower buffer, 100 million are released from the MSR.

[41] Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 59, 27.2.2019, pp. 8–69, ELI: http://data.europa.eu/eli/reg_del/2019/331/oj).

[42] Procedure 2026/0085/COD, Proposal for a Decision of the European Parliament and the Council amending Decision (EU) 2015/1814 as regards ceasing the invalidation of allowances in the market stability reserve.

- From 2029, the lower threshold of 400 million and the lower buffer of 300 million, as well as the amount of 100 million allowances to be released from the reserve when the TNAC is below the lower buffer, are proposed to decrease by a fixed annual reduction of 4 % per year.

- Third, the intake rate of the reserve is reduced from 24% to 12% as from 2028 (Article 1(5)). This means that, in the event of a surplus, future intakes will be spread over a longer period of time. In light of a shrinking cap and future market tightness, it is beneficial to spread intakes over a longer period. Consequently, the upper buffer threshold needs to be adjusted downwards to 947M to reflect the reduced intake rate.
- Fourth, changes are proposed to how aviation is taken into account in the calculation of the TNAC. Currently, Article 1(4a) requires that the net demand from aviation from 2024 is reflected in the calculation. This article is amended to include the cumulative impact of net aviation demand over 2012-2023 in the TNAC. It applies from 2028, and by taking into account the cumulative demand of aviation from 2012 in the TNAC calculation of 2027, it reduces it by 173 million allowances. This makes the MSR more responsive and will result in the earlier release of allowances.

The main amendments to the MRV Maritime Regulation and FuelEU Maritime Regulation are as follows:

- The proposal aims to deliver simplification for operators complying with the MRV/ETS and FuelEU obligations by merging the relevant MRV compliance cycles and minimising existing duplications and areas of divergences. This requires an expansion of the scope of the MRV Regulation (amended Article 2) to cover energy use in addition to GHG emissions and energy efficiency data, and an update of the monitoring and reporting requirements (amended Article 9 and Article 10) to ensure that all relevant data are collected under the same MRV system.
  - The proposed amendments introduce consequential changes to the content of the monitoring plan and the arrangements for submitting it (amended Article 6) and to the emissions report (amended Article 11). Consequently, companies are required to include and submit all necessary information in one single document in a common workflow for compliance with MRV requirements under both the MRV/ETS and FuelEU.
  - The proposal introduces changes to verification rules to cater for the extension of the Regulation to cover energy use and new consequential reporting requirements (amended Articles 13 to 16). The empowerments conferred on the Commission in relation to verification and accreditation rules under this Regulation should be implemented with a view to delivering a single accreditation and verification framework applicable under MRV, ETS, and FuelEU Maritime.
  - The proposal further confers on the Commission the power to adopt delegated acts to amend the monitoring methods and rules to make them fit for the expanded scope of the Regulation as new data points are added to cover energy use (amended Article 5).

    - The proposed amendments to the MRV Regulation require consequential amendments to the FuelEU Regulation, particularly since the monitoring-and-reporting-only-once principle is fully implemented through a shared MRV compliance cycle.

- Furthermore, the proposal introduces a new Article 4a to clarify the role of the administering authority responsible in respect of MRV obligations and to establish an attribution mechanism for any shipping company falling within the scope of the MRV Regulation to further enhance the robustness of the MRV system.

- The proposal also aims to reinforce the level-playing field through a targeted extension of the scope of the EU ETS to certain categories of ships (amended Article 2 of the MRV Regulation). This targeted extension requires delegated and implementing powers to be conferred on the Commission to provide for the relevant monitoring and reporting rules (amended Articles 5, 6 and 11 of the MRV Regulation).

- The proposal contains tailored rules to reinforce the safeguards against the risk of evasion by vessels engaged in or supporting offshore operations. These tailored rules require changes to the scope of the MRV Regulation (amended Article 2 of the MRV Regulation), the inclusion of new definitions (amended Article 3 of the MRV Regulation) and the deletion of the list of 'offshore ships' (amended Annex I to the MRV Regulation). The proposal confers on the Commission the power to adopt delegated acts to provide for the relevant monitoring and reporting rules (amended Articles 5, 6, and 11 of the MRV Regulation).

2026/0212 (COD)

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2003/87/EC and Decision (EU) 2015/1814 as regards driving competitiveness and cost-effective decarbonisation

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee[1],

Having regard to the opinion of the Committee of the Regions[2],

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) The Paris Agreement[3], adopted on 12 December 2015 under the United Nations Framework Convention on Climate Change (UNFCCC) (the 'Paris Agreement'), entered into force on 4 November 2016. The Parties to the Paris Agreement have agreed to hold the increase in the global average temperature well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1,5 °C above pre-industrial levels.

(1) The urgency to maintain the efforts to achieve the Paris Agreement goal of 1,5 °C has become more significant following the findings of the Intergovernmental Panel on Climate Change in its Sixth Assessment Report that global warming can only be limited to 1,5 °C if strong and sustained reductions in global greenhouse gas emissions within this decade are immediately undertaken.

(2) On 5 November 2025, the Union submitted its nationally determined contribution (NDC) to the UNFCCC, following its approval by the Council. The NDC indicates that, following the setting of the target for 2040 climate target of the Union, and in line with the foreseen reviews, the Commission will prepare a climate policy architecture for beyond 2030, and prepare the proposals for this policy framework that will be needed to deliver the 2040 target in a fair and cost-efficient manner.

(3) The NDC was prepared on the basis of the outcome of the political debate launched by the Commission Communication of 6 February 2024 on "Securing our future Europe's 2040 climate target and path to climate neutrality by 2050 building a sustainable, just

[1] OJ C , , p. .
[2] OJ C , , p. .
[3] OJ L 282, 19.10.2016, p. 4.

and prosperous society"[4] which was based on an extensive impact assessment, as well as stakeholder input, collected via public consultation. That impact assessment underlies the impact assessment supporting this Directive.

(4) The Competitiveness Compass[5] and the Clean Industrial Deal[6] have identified continued decarbonisation and accelerated circularity as essential elements to further reduce Europe's dependencies on fossil fuels and strengthen economic competitiveness and resilience, while setting out the direction for adapting the EU Emissions Trading System (ETS) to a changing geoeconomic context while maintaining the fundamentals.

(5) The rapidly changing geopolitical context further emphasised the importance of delivering on the Clean Industrial Deal to enhance resource security and address Europe's dependence on imported fossil fuels, which is the main cause of higher, and more volatile, energy prices. Conflicts in Ukraine and the Middle East confront the Union once again with volatile and rising energy prices driven by Europe's dependence on imported fossil fuels, which damage the competitiveness of European industry. The EU ETS should continue to be a robust, predictable and fit for purpose driver of decarbonisation, thereby lowering the EU's dependence on fossil fuel imports and strengthening its resilience, while fostering investments in the clean energy transition in homegrown renewables and other zero- and low-carbon energy sources.

(6) In its conclusions of 19 March 2026[7] the Council invited the Commission to present a review of the EU ETS by July 2026 at the latest, to reduce the volatility of the carbon price and mitigate its impact on electricity prices, including related supply chain costs, and on diversion of activities, while preserving the essential role of the ETS in the climate and energy transition through a market-based price signal for carbon emissions that drives investment and innovation. The Parliament, the Council and the Commission, signed the 'One Europe, One Market' roadmap setting Q1 2027 as target for agreement for the review of the EU ETS.[8]

(7) By Regulation (EU) 2021/1119 of the European Parliament and of the Council[9], the Union has laid down the objective of economy-wide climate neutrality by 2050 at the latest and the aim of achieving negative emissions thereafter. That Regulation also provides that the Commission is to endeavour to align all future draft measures or legislative proposals, including budgetary proposals, with the objectives of that Regulation and, in any case of non-alignment, provide the reasons for such non-alignment as part of the impact assessment accompanying those proposals.

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4 COM(2024) 63 final.

5 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, A Competitiveness Compass for the EU, 29 January 2025 (COM(2025) 30 final).

6 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation, 26 February 2025 (COM(2025) 85 final).

7 European Council Conclusions 19 March 2026 EUCO 1/26 CO EUR 1 CONCL 1.

8 One Europe, One Market Roadmap of the European Parliament, the Council of the European Union and the European Commission.

9 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1, ELI: http://data.europa.eu/eli/reg/2021/1119/oj).

(8) Regulation (EU) 2021/1119, as amended Regulation (EU) 2026/667 of the European Parliament and of the Council[10], establishes a binding Union reduction target for net greenhouse gas emissions (emissions after deduction of removals) of 90 % compared to 1990 levels by 2040. This target includes a possibility to use a limited quantity of high-quality international credits to make an 'adequate contribution' towards the 2040 target, starting in 2036. This amount can be up to 5% of 1990 EU net GHG emissions, corresponding to a domestic reduction of net GHG emissions of at least by 85% compared to 1990 levels by 2040. In accordance with Article 4(5)(a) of Regulation (EU) 2021/1119, a pilot period in 2031-2035 may be considered.

(9) All sectors of the economy need to contribute to achieving the emission reductions established by Regulation (EU) 2021/1119. Therefore, the ambition of the EU ETS should be adjusted to be in line with the economy-wide net greenhouse gas emission reduction target for 2040, the objective of achieving climate neutrality by 2050 at the latest and the aim of achieving negative emissions thereafter, as laid down in Regulation (EU) 2021/1119.

(10) The NDC of the Union and its Member States under the Paris Agreement includes emissions from aviation subject to effective carbon pricing through the EU ETS which, until 31 December 2026, only comprises flights within the European Economic Area (EEA), departing flights to Switzerland and departing flights to the United Kingdom. The NDC notes that any broader scope would result from the amendment of Directive 2003/87/EC of the European Parliament and of the Council[11] based on this Directive. Emissions from aviation are expected to increase, unless the use of alternative fuels is increased. The additional aviation emissions covered by the EU ETS from 2027 onwards should not yet be included in the NDC of the Union and its Member States, nor be considered to be emissions for the purposes of Regulation (EU) 2021/1119.

(11) There should be further support from the EU ETS for the use of sustainable aviation fuels alongside binding legislative mandates pursuant to Regulation (EU) 2023/2405 of the European Parliament and of the Council[12], notwithstanding that these mandates are in place even without support from the EU ETS. Therefore, the availability of reserved allowances for the use of sustainable aviation fuels and other aviation fuels that are not derived from fossil fuels under Article 3c(6) of Directive 2003/87/EC should be extended until 2040. A lower proportion of the price difference should be covered, in order to enable a longer period of time for the mechanism being in place. There should also be equal treatment of all forms of propulsion, including electrification. The extension of the geographic scope of the EU ETS for aviation, in combination with the corresponding increase of the total amount of allowances to be allocated in respect of aircraft operators, enables an increased number of allowances for supporting alternative propulsion technologies and fuels.

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10 Regulation (EU) 2026/667 of the European Parliament and of the Council of 11 March 2026 amending Regulation (EU) 2021/1119 as regards the setting of a Union intermediate climate target for 2040 (OJ L, 2026/667, ELI: http://data.europa.eu/eli/reg/2026/667/oj).

11 Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32, ELI: http://data.europa.eu/eli/dir/2003/87/oj).

12 Regulation (EU) 2023/2405 of the European Parliament and of the Council of 18 October 2023 on ensuring a level playing field for sustainable air transport (ReFuelEU Aviation) (OJ L, 2023/2405, 31.10.2023, ELI: http://data.europa.eu/eli/reg/2023/2405/oj).

(12) Notwithstanding that the scope of carbon pricing is only extended partially from January 2029, the ETS support for alternative propulsion technologies and fuels should nonetheless be extended to all departing flights from that date. This maintains equal treatment on all routes departing from any aerodrome in the European Economic Area, and incentivises their rapid deployment.

(13) To reduce aviation's total climate impacts, the support mechanism referred to in Article 3c(6) of Directive 2003/87/EC should also support cost-effective approaches. The use of contrail forecasting models to support cost-effective mitigation of contrails (also known as condensation trails) offers a low-cost complement to other approaches supported by this mechanism. It should rely on a limited share of the number of allowances reserved for the purposes provided for in Article 3c(6). The mechanism should be complementary to the monitoring, reporting and verification framework for non-CO_2 aviation effects pursuant to Article 14(5) of that Directive.

(14) In view of rewarding most efficient installations, it is appropriate to extend the possibility, for installations previously included in the EU ETS due to the operation of combustion units with a total rated thermal input exceeding 20 MW that change their production processes to reduce their greenhouse gas emissions and no longer meet that threshold as a result, to remain under the EU ETS until the end of the two following five-year periods for free allocation following the change to their production processes.

(15) For business flights, the reserved amount of allowances should only be available in the case of aircraft using electricity or hydrogen for propulsion. In order to ensure uniform conditions for the allocation of reserved allowances pursuant to Article 3c(6) of Directive 2003/87/EC, implementing powers should be conferred on the Commission to adopt a list of aircraft that are considered business aircraft. Such powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council[13].

(16) In view of ensuring that installations are always covered by either the status of new entrant or of incumbent installation within each of the five-year periods referred to in Article 11 of Directive 2003/87/EC, it is necessary to revise the definition of new entrant under that Directive. Specifically, the definition of a 'new entrant' under Article 3, point (h), of Directive 2003/87/EC, read together with the definition of an 'incumbent installation' under Article 2, point (1), of Commission Delegated Regulation (EU) 2019/331[14], there is a missing time period of 1.5 years at the end of each free allocation period, starting three months before the submission of the list for the next period pursuant to Article 11(1) of Directive 2003/87/EC, where neither of the two definitions apply. Therefore, the definition of 'new entrant' should be revised to align with the current practice, whereby an installation is only treated as incumbent where it is included in the list submitted pursuant to Article 11(1) of Directive 2003/87/EC for the relevant period. As a result, any installation receiving a permit for the first time within the period starting from three months before the date for

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13 Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, pp. 13–18, ELI: http://data.europa.eu/eli/reg/2011/182/oj).

14 Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council, (OJ L 59, 27.2.2019, pp. 8–69, ELI: http://data.europa.eu/eli/reg_del/2019/331/oj).

submission of the list under Article 11(1), and ending on 31 December of the last year of the corresponding five-year period for free allocation should regarded as a new entrant for that period. In the situation where an installation obtains a greenhouse gas emissions permit for the first time which is then, successively, withdrawn and that installation is granted another new greenhouse gas emissions permit under the same allocation period, the installation should only be able to re-enter the EU ETS in the following allocation period, under the applicable qualification either as new entrant or incumbent installation in accordance with the relevant definitions under Article 3, point (h), of Directive 2003/87/EC and Article 2, point (1), of Delegated Regulation (EU) 2019/331.

(17) The Union is to achieve climate neutrality by 2050 at the latest and all sectors of the economy, including maritime transport, are to contribute to achieving the emission reductions established by Regulation (EU) 2021/1119, in line with its updated NDC. The inclusion of maritime transport in the EU ETS since 2024 ensures that the sector contributes its fair share to the climate objectives of the Union as well as to the objectives of the Paris Agreement. The International Maritime Organization (IMO) adopted, in 2023, a strategy to decarbonise shipping[15] 'by or around, i.e. close to, 2050' and agreed on developing mid-term measures to implement it, considering a basket of candidate measures covering both technical and economic elements. The adoption and implementation of such a global measure putting effectively a price on greenhouse gas emissions from maritime transport in parallel to the EU ETS would entail a risk of double payments by shipping companies. The provisions of Directive 2003/87/EC as regards maritime transport activities should be reviewed in the event of the adoption by the IMO of a global market-based measure to reduce greenhouse gas emissions from maritime transport. To this end, the Commission should present a report to the European Parliament and to the Council within 18 months of the adoption of such a measure and before it becomes operational. The Commission should in that report examine that global market-based measure as regards its ambition in light of the objectives of the Paris Agreement, its overall environmental integrity, including in comparison with the provisions of Directive 2003/87/EC covering maritime transport, and any issue related to the coherence of the EU ETS and that measure, including avoiding double payment. As appropriate, and in order to prevent such a risk of double payment while ensuring that no environmental backsliding occurs, the accompanying legislative proposal should provide for an IMO deduction mechanism according to which it is appropriate to allow shipping companies to surrender fewer allowances than their verified emissions to the extent that those emissions are also effectively priced under the IMO measure. To take into account the potential role of the Union in supporting the broader international effort to decarbonise maritime transport, the accompanying legislative proposal should provide for a measure according to which allowances are to be reserved to supportleast developed countries and small island developing countries.

(18) Significant investments will continue to be required to support the decarbonisation of maritime transport, including investments in fleet retrofitting and the deployment of clean technologies. At the same time, Member States with a particularly high concentration of shipping companies relative to their population continue to incur proportionately higher administrative costs in implementing the EU ETS to support decarbonisation of maritime transport including supporting capital investments in the

[15] ANNEX 1, RESOLUTION MEPC.377(80), Adopted on 7 July 2023, 2023 IMO Strategy on reduction of GHG emissions from ships.

maritime sector, including ports, shipping companies, as well as for the use of sustainable fuels and propulsion technologies. The temporary allocation of allowances provided for in Article 3ga(3), second subparagraph of Directive 2003/87/EC contributes to supporting those objectives through the use of the corresponding auction revenues in accordance with this Directive. It is therefore appropriate to extend its application until 31 December 2038. The Commission should assess, by 30 September 2035, whether a further extension is justified.

(19) The transition from the use of fossil fuels, alongside energy efficiency improvements, is essential to achieving the decarbonisation of the maritime sector. However, the significant price differentials between conventional fossil fuels and sustainable maritime fuels as well as the pace of deployment of zero-emission propulsion technologies, such as electric and wind-assisted propulsion systems, hamper this transition. Support to early movers is therefore desirable to de-risk investments in maritime decarbonisation in the Union. Hence, during the period from 1 January [2028/first year after the entry into force of this directive] until 31 December 2040, 110 million allowances should be reserved to be allocated to shipping companies, on a transparent, equal and non-discriminatory basis, to cover part of the price differential between conventional fossil fuels and eligible sustainable maritime fuels, as well as all or part of the additional cost incurred in deploying and operating eligible zero-emission propulsion technologies, and technologies required to use eligible sustainable maritime fuels upon verified operation on such fuels. Where allowances are allocated to a shipping company under this reserve, such allocation should be taken into account by the shipping company if it intends to transfer the costs arising from the surrender of allowances to another entity in accordance with the reimbursement mechanism laid down in Article 3gc of Directive 2003/87/EC. For instance, contractual arrangements may provide for the transfer of the allocated allowances from the shipping company to the other entity. The Commission should be empowered to adopt delegated acts to supplement Directive 2003/87/EC with the detailed rules necessary for the application of this reserve and to adopt implementing acts to establish the lists of non-Union ports and third countries in respect of which a derogation from the origin requirements should apply.

(20) Given the evolving technological and commercial maturity of sustainable maritime fuels and zero-emission alternative propulsion technologies, the Commission should carry out an evaluation of the functioning of the reserve established under Article 3gaa.

(21) Evasive behaviour from shipping companies is problematic, in particular as it can undermine the environmental integrity of the EU ETS. In order to reduce the risk of evasive port calls by containerships to ports outside the Union and the relocation of container transhipment activities outside the Union, Directive 2003/87/EC provides for an exclusion from the definition of 'port of call' of stops of containerships in a neighbouring container transhipment port identified in the implementing acts adopted pursuant to Article 3ga(2) of that Directive. However, the criterion related to the port's share of transhipment of containers may not adequately cover ports outside the Union that have a high potential to attract transhipment activities from Union ports and where the transhipment of containers accounts for most container traffic. It is therefore appropriate to set this criterion at 50 % instead of 65 %. In addition, it is appropriate to exclude from the definition of 'port of call' ports with the necessary infrastructure for container transhipment activities that are located in the Union's immediate vicinity,

namely within 150 nautical miles from a port under the jurisdiction of a Member State. To ensure the proportionality of the measure and that it results in equal treatment, account should be taken of measures in third countries that have an effect equivalent to Directive 2003/87/EC. This includes ports in a third country with whom an ETS linking agreement is in place. To better capture major disruptions in the shipping market, which can rapidly alter container transhipment patterns, the Commission should review the validity of the list that identifies neighbouring container transhipment ports once a year instead of once every two years. However, for reasons of administrative efficiency, the Commission should be empowered to adopt implementing acts that amend the list of neighbouring container transhipment ports only where necessary, for example where a port ceases to meet the criteria to be identified as a neighbouring container transhipment port. In order to further reduce the risk of evasive port calls outside of the Union and the relocation of container transhipment activities outside of the Union, it is appropriate to provide for a complementary measure. Such measure should consist in a temporary derogation from the surrender obligations under Directive 2003/87/EC in respect of certain maritime transport activities by large containerships that perform long-distance voyages between ports outside the Union and Union ports.

(22) To avoid or minimise EU ETS compliance costs, shipping companies performing or supporting offshore operations might be inclined to use bases located outside the Union instead of bases located in the Union, or to add evasive port calls outside the Union. To reduce the risk of circumvention and ensure a level playing field, the definition of ‘port of call’ should be amended in order to include offshore worksites where shipping companies perform or support offshore operations, including activities of scientific research concerning the resources of the seabed and its subsoil, and activities related to the design, planning, construction, operation, maintenance and decommissioning of offshore installations and infrastructure.

(23) Emissions from ships below 5 000 gross tonnage but not below 400 gross tonnage represent about 15 % of emissions from ships under the scope of application of Directive 2003/87/EC, but emissions from ships within that range are emitted by a large number of ships. The inclusion of emissions from certain categories of ships below 5 000 gross tonnage but not below 400 gross tonnage is beneficial to improve the effectiveness of the EU ETS and the level playing field with ships of 5 000 gross tonnage and above and therefore those ships should be included in the scope of this Directive. No later than 31 December 2031, the Commission should present a report to the European Parliament and to the Council in which it should examine the feasibility and economic, environmental and social impacts of the inclusion in Directive 2003/87/EC of emissions from ro-pax ships and passenger ships below 5 000 gross tonnage.”

(24) The current derogations provided for in Directive 2003/87/EC from the obligation to surrender allowances for ice-class ships, for voyages involving outermost regions and small islands without a fixed land connection, and for certain passenger transport services operated under public service obligations or public service contracts are set to end on 31 December 2030. While the decarbonisation of ice-class ships and the fleets serving those routes and services is progressing and innovative technologies such as battery-electric and wind-assisted propulsion are becoming increasingly viable, the large-scale deployment of emission reduction solutions on those vessels that are important for connectivity purposes remains constrained, in particular by infrastructure

and investment needs. In order to allow sufficient time for that transition,16 and in light of the need to ensure territorial continuity, connectivity and affordability of essential maritime services, the duration of these derogations should be extended for a limited period of time. Given the specific technical and operational challenges associated with the decarbonisation of ice-class ships, the Commission should review, before the expiry of the derogation applicable to those ships, the progress made in the deployment of suitable low- and zero-emission technologies and assess the appropriateness of extending that derogation beyond 31 December 2035.

(25) In order to support global climate action and facilitate the pricing of greenhouse gas emissions in third countries, support should be provided to third countries in respect of emissions that are not already subject to surrender obligations under Directive 2003/87/EC. The Commission should be empowered to adopt delegated acts to amend, where relevant, the geographical scope laid down in Article 3ga(1) of Directive 2003/87/EC for maritime emissions released during voyages between the Union and the third country to which support is provided. In order to supplement Directive 2003/87/EC, the Commission should also be empowered to adopt delegated acts to lay down rules on the operation of that support to third countries. This would also facilitate the implementation of the ETS linking agreement being prepared with the United Kingdom.

(26) With a view to addressing unclear implementation situations and diverging Member States' practice, as well as providing means to address continuous non-compliance with Directive 2003/87/EC, it is necessary to clarify existing rules as regards the granting, suspension and withdrawing of greenhouse gas emissions permits by competent authorities, and further develop them to enhance harmonisation. In order to ensure harmonised conditions for the implementation of Article 6 of Directive 2003/87/EC, as regards the granting, suspension and withdrawing of greenhouse gas emissions permits by the competent authorities, the Commission should be empowered to adopt implementing acts. Such powers should be exercised in accordance with Regulation (EU) No 182/2011.

(27) Directive (EU) 2023/959 of the European Parliament and of the Council[17] which amended Directive 2003/87/EC by extending the activity in Annex I to Directive 2003/87/EC on transport by pipeline of greenhouse gases for the purpose of storage, to all means of transport. The development of this activity has demonstrated the complexity in appointing the administrating authority for cases of cross-border transport, making it necessary to clarify which Member State should grant permits to the operator of the CO_2 transport infrastructure. To privilege clarity and thus speed up permitting, a clear rule, applicable in all cases, should be established, whereby the competent authority should be the one of the Member State where the CO_2 is collected, which will be where it is captured. The competent authority should be responsible for that CO_2 transport until the CO_2 is collected by an operator in another Member State. Member States where the CO_2 only transits should not be involved in the permitting of the CO_2 transport activity.

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[16] European Commission: Directorate-General for Climate Action and Ricardo, *Electric vessels and wind-assisted propulsion systems- opportunities for the EU maritime industry and value chain – Final report*, Publications Office of the European Union, 2026, https://data.europa.eu/doi/10.2834/7505429.

[17] Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system (OJ L 130, 16.5.2023, ELI: http://data.europa.eu/eli/dir/2023/959/oj).

(28) Achieving the Union’s emission reduction target of -90% by 2040 as compared to 1990 levels requires adjusting the rate of reduction in the emissions of the sectors covered by the EU ETS from 2031. The linear reduction factor provided for in Article 9 of Directive 2003/87/EC should therefore be adjusted.

(29) The rate of reduction should also take account of the provisions of the European Climate Law regarding the use of high-quality international credits as adequate contribution towards the EU 2040 climate target, starting in 2036. International credits should be integrated in the future climate legislation using high-quality and integrity credits. The use of credits should support both the EU and third countries in achieving GHG reductions compatible with the Paris Agreement. High credit integrity must be ensured and where appropriate the rules developed under Article 6.4 of the Paris Agreement may be complemented. The specific role and deployment of international credits will be based on an impact assessment and subject to the development of Union law setting robust and high integrity criteria and other safeguards. In view of the establishment of a facility for the purchase of international credits to reduce the overall need for domestic action by up to 5 percentage points, the target emissions reductions for the EU ETS should be in line with an overall EU-wide domestic ambition of -90% until 2035 and of -85% from 2036 to 2040. This should be reflected through a lower linear reduction factor of the EU ETS from 2036, and allowances should be put aside for the purchase of the amount of international credits that correspond to the reduction of the ambition in the EU ETS. The Commission should report to the European Parliament and to the Council on the development of a high-quality and high-integrity international credit market, taking into account the criteria set out in Regulation 2021/1119/EU, and the contribution of these credits to the climate ambition of the activities listed in Annex. Subject to this report, the linear reduction factor from 2036 should revert to a trajectory for ETS sectors aligned with an EU domestic reduction of 90% by 2040 in the event that high-quality and high-integrity, cost-effective international credits are not available.

(30) Carbon removals are introduced as a flexibility in the European Climate Law to allow the EU to reach its 2040 climate target in a more cost-efficient way, as some emissions will be more cost-efficient to offset through removals than to abate them. In particular, they can contribute to compensate remaining hard-to-abate GHG in sectors covered by the EU ETS. In that context, the EU ETS should contribute to their uptake and financing, including because they can be generated by activities already covered by the EU ETS. Foregoing the flexibility provided by permanent carbon removals would be at the cost of the EU’s competitiveness and the environment in the medium to long term. Together with other adjustments to the system, such as to the total emissions cap and the Market Stability Reserve (MSR), the integration of permanent carbon removals can contribute to cost containment and improving liquidity in the EU ETS as its cap shrinks. The integration of permanent carbon removals can also provide an avenue to incentivise the development and deployment of nascent negative emissions technologies. Beyond 2040, alternative or complementary mechanisms to generate permanent removals may need to be developed to reach net-zero in 2050 and net-negative emissions thereafter. All adjustments to the cap set out in Article 9 should take into account the emissions of the EEA and the European Free Trade Association (EFTA), as well as regarding the integration of domestic permanent carbon removals.

(31) The integration in the EU ETS rests on the basic principle that the cancellation of a removal unit replaces the surrendering of an emission allowance, which represents the payment of the price for having emitted a tonne of CO_2. As a consequence, only

permanent removals can be integrated in the EU ETS. In addition, it is preferrable to integrate only those removals for which reversals are subject to monitoring and the surrendering of allowances in the EU ETS.

(32) The current price-difference between permanent carbon removals and allowances means that permanent removals will need to be supported in a predictable manner, to ensure that their generation in line with the additional emission space that is created in the ETS through the issuance of allowances. In addition, because they are novel instruments, their integration must protect the EU ETS from uncertainty and must guarantee the environmental integrity of the units that are used to compensate an emission in the EU ETS. Therefore, removals should be integrated in the EU ETS by the Commission. To that end, the total quantity of allowances in the EU ETS should be increased by a number of allowances that should be allocated to the Commission for the purchase of an equivalent amount of permanent carbon removals to offset the newly created allowances. The linear reduction factor should not apply to this quantity of allowances, at it is equivalent to the amount of removals that should be purchased. In addition to these newly created allowances, further allowances should be assigned to the Commission to generate revenues through their auctioning for the purchase of the permanent carbon removals, in view of the expected cost differential between allowances and carbon removals. Where fewer allowances are required for financing carbon removals than expected, the unused allowances should be integrated back in the Union-wide quantity of allowances referred to in Article 9 of Directive 2003/87/EC. The net target of the EU ETS is the equivalent of the gross emissions minus the permanent carbon removals that are subject to integration.

(33) To facilitate the use of permanent carbon removals by operators, shipping companies and aircraft operators, these should be allowed to compensate their own fossil emissions with their biogenic CO_2 emissions captured and permanently stored, which are certified as permanent carbon removal units in accordance with the methodologies for the certification of domestic permanent biogenic emissions capture with carbon storage (BioCCS) removals established under Regulation (EU) 2024/3012 of the European Parliament and of the Council[18]. To avoid double counting, carbon removals units used for the purpose of compensating own emissions should be cancelled from the Union Registry provided for in Article 12 of Regulation (EU) 2024/3012 of the European Parliament and of the Council[19]. This compensation mechanism cannot entail the generation of negative emissions or the of obtaining allowances. It should lead to an adjustment of the allowances assigned for the purchase of carbon removals and to the carbon removals that are to be purchased, to prevent the total emission space from increasing beyond the limit implied by the integration through the purchasing programme.

(34) All adjustments to the cap set out in Article 9, as well the amount of domestic permanent carbon removals to be integrated, should take into account the emissions of the EEA and the European Free Trade Association.

(35) Regulation (EU) 2024/3012 of the European Parliament and of the Council establishes a framework to certify carbon removals, carbon storage in products, and carbon

[18] Regulation (EU) 2024/3012 of the European Parliament and of the Council of 27 November 2024 establishing a Union certification framework for permanent carbon removals, carbon farming and carbon storage in products (OJ L, 2024/3012, ELI: http://data.europa.eu/eli/reg/2024/3012/oj).

[19] Regulation (EU) 2024/3012 of the European Parliament and of the Council of 27 November 2024 establishing a Union certification framework for permanent carbon removals, carbon farming and carbon storage in products (ELI: http://data.europa.eu/eli/reg/2024/3012/oj).

farming in the Union. The CRCF Regulation provides for high-integrity transparency as regards the duration of carbon storage because carbon is only considered stored as long as the activity is monitored and subject to appropriate liability rules. To consider carbon storage from nature-based solutions as permanent, it will be necessary that sufficiently long-term monitoring of a carbon farming activity is ensured and that any liability for future reversals is taken on appropriately through enforceable financial, institutional, and contractual mechanisms, such as a permanence fund. Therefore, the Commission should examine the possible contribution of nature-based solutions and carbon farming to permanent removals in the context of the review of this Directive.

(36) The EU ETS is a meaningful tool for climate financing. Since 2013, it has generated substantial revenues, the majority of which are allocated to Member States, and it has allocated free allowances of equally substantial value. To fully realise its potential, the revenues from the ETS must be deployed strategically to accelerate decarbonisation and thus bolster industrial competitiveness. While Member States have been required since June 2023 to allocate all ETS revenues to climate and energy purposes and to ensure transparency, current spending patterns reveal shortcomings. Critical areas, such as industrial decarbonisation—which accounts for a major share of EU emissions—receive disproportionately low funding, as do other areas that are essential for decarbonisation. Furthermore, some investments risk undermining climate neutrality by perpetuating dependencies on carbon-intensive technologies, thereby creating long-term lock-in effects.

(37) Industrial decarbonisation will require direct or indirect electrification of processes currently using fossil fuels including related investment needs of the energy system. The Electrification Action Plan[20] includes concrete measures to enable and accelerate affordable electrification of industry. Preparing the energy system for the additional demand from industrial decarbonisation projects, particularly around industrial clusters, is an urgent priority. Using national ETS revenues to support investments into strengthening the grid, into electricity storage and into other options that enhance power system flexibility as well as into accelerated planning and permitting at local and regional level will provide industry with affordable and reliable options to use electrification in order to decarbonise.

(38) To address those aspects, the Member States should be required to spend a minimum share of their revenues in priority purposes, focused on the decarbonisation of the ETS sectors, including related investment needs of the energy system. This should include investments in industrial decarbonisation (such as in steel, chemicals and fertilisers - which play an important role to ensure food security) - through electrification, carbon capture, utilisation, and storage, and other clean technologies; clean energy sources and grid infrastructure; low-carbon transport (particularly in maritime and aviation); waste management decarbonisation and circularity measures to decarbonise ETS sectors; the development of lead markets for low-carbon and circular products (such as bio-based fertilisers, bio-based chemicals and green steel) which also benefit end-users such as farmers; and research and innovation in these fields. Priority should be given to the electrification of industrial process heat where technically feasible, enhancing energy security. Regarding fertilisers, investment should in particular support end-users in the uptake of bio-based, organic and circular fertilisers, in line with the Fertilizer Action Plan[21]. As regards nature-based solutions contributing to decarbonisation, Member States should take into account the priorities, measures and

[20] [Full reference to be added] COM(2026)595.
[21] COM/2026/310 final.

financing needs identified in national restoration plans established pursuant to Regulation (EU) 2024/1991. Additionally, investments should only be possible where they are aligned with the Union's long-term climate goals, excluding those prolonging reliance on fossil fuels in power generation. Member States should also have the option to use the revenues to top-up ETS financing mechanisms.

(39) Transparency and visibility regarding the use of auction revenues is essential to ensure the acceptability and credibility of the Union's climate policies. Member States should be obliged to publicly communicate the origin of ETS-funded measures through multiple channels, such as project documentation and public displays. The use of the standardised EU label will be a key tool to achieve this visibility. Such reforms on the use of auction revenues should be complemented by amendments to Regulation (EU) 2018/1999 of the European Parliament and of the Council[22], which will require Member States to integrate their planned use of ETS auction revenues into their National Energy and Climate Plans (NECPs). This ex-ante planning obligation will ensure strategic alignment with national and EU-wide climate targets, facilitate greater stakeholder participation and improve monitoring, public scrutiny, and visibility.

(40) Member States report yearly to the Commission on the implementation of Directive 2003/87/EC pursuant to Article 21 thereof. On this basis, the Commission publishes a report on the functioning of the European carbon market. The use of the reported data in this way should therefore be clarified through the addition of a reference to Article 21(1) in Article 10(5) of that Directive. In order to align with existing practice, a yearly reporting deadline of 30 June should be set. The Commission should publish the report on the functioning of the European carbon market within six months of receiving the relevant information and reports from the Member States. Besides the publishing of this report, the self-standing reporting obligation for the Commission under Article 21 should be deleted to reduce administrative burden. The exchange of information organised by the Commission pursuant to Article 21(5) should no longer concern the use of Emission Reduction Units from Joint Implementation (JI) and Certified Emission Reduction from Clean Development Mechanism (CDM) in the EU ETS as the CDM and JI have been replaced with the new market mechanism established under the Paris Agreement.

(41) To mitigate the risk of carbon leakage and support the competitiveness of electro-intensive industries, Member States should retain the possibility to grant State aid compensating for indirect emission costs passed through electricity prices, in line with Union State aid rules. For the State aid guideline post-2030, the Commission will assess how to incentivise economically viable decarbonisation, while not undermining the carbon leakage objective of the support. The emission factors used to calculate compensation should reflect the emission intensity of the relevant electricity production mix in the respective geographic area with a view to taking into consideration where possible the role of fossil and non-fossil sources in the setting of electricity prices. To streamline administrative processes, reporting on indirect cost

[22] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, pp. 1–77, ELI: http://data.europa.eu/eli/reg/2018/1999/oj).

compensation should be integrated into the broader reporting obligations on the use of auction revenues under Regulation (EU) 2018/1999.

(42) Directive (EU) 2023/959 effected the revision of the EU ETS legislative framework by introducing conditionalities for free allocation linked to the implementation of energy efficiency recommendations from energy audits, and obligations to establish climate-neutrality plans for district heating and for the 20% least efficient installations under each ETS product benchmark. Building on the experience of conditionalities relating to district heating, and in view of aligning with the climate neutrality ambition of the EU, starting from the five-year period for free allocation beginning on 1 January 2031, free allocation in the EU ETS should, as a principle, become conditional on establishing a plan to invest in decarbonisation in the EU ('Invest in EU decarbonisation plan') and to implementing decarbonisation investments that lead to increased homegrown production of decarbonised and low carbon products as well as to significant reductions in overall climate impacts, including emissions reduction. Therefore, it is appropriate to replace other specific conditionality regimes for free allocation, from 2031 onwards, by the decarbonisation investment in the EU conditionality which is being introduced for free allocation.

(43) The Invest in EU decarbonisation plan should be simple and provide a structured and transparent pathway, together with intermediate targets, for installations to align with Union-wide climate-neutrality by 2050 as provided for in Regulation (EU) 2021/1119, and should consider the impact of the measures and investments it includes on achieving significant emissions reduction. The Invest in EU decarbonisation plan and its content, should be verified in accordance with existing and well-established rules under Article 15 and be made publicly available. In addition, in order to ensure that emissions and impacts reduction occur in the EU, operators of installations applying for free allocation should be required to invest in the EU an amount equivalent to the financial value of 100% of their free allocation in the relevant five-year period into decarbonisation of their activities covered by this Directive, effectively leading to significant verified reductions in emissions, within the same period. What constitutes 'significant emission reductions' should be defined by the Commission by means of delegated acts in a science-based manner and aligned with the climate neutrality objective as set out in Regulation (EU) 2021/1192. Consequently, allowances allocated for free become decarbonisation investment allowances in the EU.

(44) To minimise administrative burden and ensure alignment with the procedures leading up to the determination of free allocation to installations, it is appropriate to make full use of synergies with the well-established, highly efficient and mature process. Therefore, the Invest in EU decarbonisation plan, as a one-off exercise for five or more years, is to be submitted together with the data included in the national implementation measures pursuant to Article 11 of Directive 2003/87/EC concerning incumbent installations and together with the application for free allocation concerning new entrants. With a view to ensuring the content of measures and investments included in the Invest in EU decarbonisation plan reflects genuine emissions reduction strategy, it is appropriate to provide flexibility for their submission at a later stage together with activity-level change reports referred to in Commission Implementing Regulation (EU) 2019/1842[23]. Where appropriate, the detailed timeline for the

23 Commission Implementing Regulation (EU) 2019/1842 of 31 October 2019 laying down rules for the application of Directive 2003/87/EC of the European Parliament and of the Council as regards further arrangements for the adjustments to free allocation of emission allowances due to activity level changes (OJ L 282, 4.11.2019, pp. 20–24).

submission of the Invest in EU decarbonisation plans should be clarified by the Commission by means of delegated acts.

(45) 80 % of the amount of free allocation for the relevant five-year period for which the application for free allocation is submitted should be allocated in annual tranches with a regular transfer of free allocation after the approval of an Invest in EU decarbonisation plan. The remaining 20 % of the amount of allowances to be allocated for free in that five-year period should only be allocated to the installation upon verification that the decarbonisation investments, which can include both captial expenditure ('CAPEX') and operating expenditure ('OPEX'), corresponding to the economic value of 100% of the amount of free allocation for that period, were implemented and that, based on the relevant existing and well-established annual emissions reports, those investments led to significant emissions reduction by the end of the five-year period. To further incentivise the long-term investment in the Union, operators should be required to return the allowances received under Article 10a(3c) first sub-paragraph, if the operator relocates or otherwise transfers its relevant acitivities outside of the Union. In order to further design the processes as simple and efficient as possible and reflect well-established industrial practices, while also guaranteeing the strategic investments in modernising European industries, it is appropriate for the Commission to further operationalise those rules by clearly establishing, by means of delegated acts and, in close consultation and transparently with the relevant stakeholders, the list of requirements and eligible costs to qualify as decarbonisation investments as well as the methodology for determining the economic value of the quantity of free allowances received. In order to further reduce administrative burden, maximise synergies with existing industrial practices and to fully reflect the specific circumsances of the industrial sectors covered by the EU ETS, these delegated acts should be developed in close cooperation with the industry.

(46) To minimise administrative burden and ensure robust compliance, the implementation of the decarbonisation investments in the EU and the achievement of significant emissions reduction should be verified, no later than two years after the end of the relevant five-year period, on the basis of the already-required annual emissions and activity level reports submitted in the context of the existing solid monitoring, reporting and verification processes. Any unallocated or returned allowances from the amount of free allocation under the relevant five-year period should be used in the context of free allocation in the next period.

(47) To ensure synergies with the new Investment Booster ('IB') and Industrial Decarbonisation Bank ('IDB') and the Innovation Fund, derogations to the newly established investment conditionality rules for free allocation should apply to installations selected for support under those funds. In view of simplifying procedures and avoiding additional administrative burden, it is appropriate to exempt the operators of installations from the establishment an Invest in EU decarbonisation plan, where a project in their installation was selected for the award of support under the IDB or the Innovation Fund is being implemented during the relevant five-year period for free allocation. The first 80 % of the amount of free allocation for the relevant five-year period should be allocated to the installation following the decision to award support to the project under those funds. In addition, for those installations, the investments and emissions reduction requirements conditioning the remaining 20 % of free allocation for the period should be deemed fulfilled upon the double condition that the support under the Innovation Fund starts being disbursed or physical construction concerning projects supported by the IDB or IB starts, and that it has

been verified that eligible costs correspond to a volume at least equivalent to the economic value of 100% of the amount of free allocation under the relevant five-year period were invested. Given the number of operators expected to benefit from the support made available under the Innovation Fund, IDB and IB, this will automatically lead to these operators being exempt from the conditionality and, hence, further simply their access to free allocation.

(48) To recognise their efforts and reduce administrative and compliance burdens for the 10 % most efficient installations setting the revised benchmark values in a sector or subsector in accordance with Article 10a(2), third subparagraph of Directive 2003/87/EC, for zero and low emitting installations, and for small installations remaining voluntarily under the ETS, it is appropriate to exempt them from the investment conditionality rules for free allocation.

(49) The exempted installations should be eligible for the full amount of free allocation under the five-year period in which they apply for free allocation, without being required to establish an Invest in EU decarbonisation plan or to implement investments in the EU leading to significant emissions reductions. When determining by means of delegated acts the requirements for installations to qualify as zero emissions or low carbon, the Commission should take into account the estimated sector specific emissions reductions, the climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119, as well as the available low carbon technologies and other abatement options available for each sector, including the net-zero technologies listed in Article 4 of Regulation (EU) 2024/1735[24].

(50) To reflect sectoral capacities and accommodate, on the one hand, uneven access of individual installations to decarbonisation solutions, including access to infrastructure such as electricity grids of sufficient capacity, green hydrogen and carbon dioxide transport infrastructure, and, on the other hand, geographic disparities, it should be permitted to leverage collective efforts towards decarbonising production processes between different installations, including for installations in multiple Member States. It is therefore appropriate to allow for the conditionality requirement concerning the investments in significant emissions reductions in the EU to be fulfilled via pooling through a joint decarbonisation investment agreement between several ETS installations. This should allow flexibility for one or more operators to fulfil the decarbonisation investment requirements on behalf of other operators that are part to the agreement. To reflect emissions and capacities of such a pool, it is appropriate to require that, in that case, the investment volume corresponds to at least 100% of the amount of free allocation allocated to all installations in the pool during the five-year period. To limit administrative burden and ensure integration within the process leading up to the establishing of free allocation to installations in the EU, such an agreement should at least apply for the five-year period referred to in Article 11 of Directive 2003/87/EC for which the installations are applying for free allocation and should be concluded before any of the installation from the pool submits an application for free allocation. A higher level of emission reduction should be required for the installation or installations that will make the investment on behalf of the pool. The Commission should further operationalise, by means of implementing and delegated acts, the details of the application procedure to form a pool, including the

24 Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe’s net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (OJ L, 2024/1735, 28.6.2024, ELI: http://data.europa.eu/eli/reg/2024/1735/oj).

minimum content and detailed conditions for the application to form a pool, the detailed timeline for its submission to the competent authority, and the details of the distribution of liability and obligations between operators that form a pool. This pooling provision will also significantly reduce administrative burden on the operators that pool together, because any conditionality-related monitoring and reporting obligation will be carried out only by the designated installation or installations within the pool.

(51) Rules governing the update of the benchmark values need to be established for the allocation periods from 2031 to 2040. As already applied under the previous periods, the updated benchmark values should be determined on the basis of data from the years 2007 and 2008, to be updated in line with observed improvement through applying a factor that represents the best assessment of progress across sectors over the period and considering the average performance of the 10 % most efficient installations in the relevant years. Robust, objective and verified data from installations, submitted pursuant to Article 11 of this Directive should be used as reference for the determination of the average performance of the 10 % most efficient installations so that benchmark values reflect the actual rate of improvement. Information submitted by a third country for installations in its territory in accordance with an agreement concluded pursuant to Article 25 may also be taken into account. To ensure appropriate protection against the risk of carbon leakage and ensure sufficient free allocation levels better reflecting the actual decarbonisation pathway of industrial sectors for the period from 2031 to 2040, the same minimum update rate percentages as for the ongoing period from 2026 to 2030 should apply, while the maximum update rate percentages for the same period are updated to reflect this necessity. Therefore, the benchmark values should be adjusted in respect of each year between 2008 and the middle of the periods from 2031 to 2035 and from 2036 to 2040, as applicable, in a range comprised between a minimum update rate of 0,3 % and a maximum update rate of 2 %, leading, in the period from 2031 to 2035, to an improvement of 7.5 % to 50 % respectively compared to the value applicable in the period from 2013 to 2020.

(52) To better reflect available emissions reduction capacities in different industrial sectors, it is appropriate to establish sector-specific heat and fuel benchmarks (‘fallback benchmarks’). To do so, it is necessary to complement the existing empowering provision and allow the Commission to define such sector-specific fallback benchmarks in the Union-wide ex-ante benchmarks of Annex I to Delegated Regulation (EU) 2019/331, their system boundaries and the reference values for the determination of the annual update rate.

(53) In the event that demand for free allowances triggers the need to apply a uniform cross-sectoral correction factor before 2040, the share of allowances to be auctioned over the ten year period beginning on 1 January 2031 should be reduced by up to 4 % of the total quantity of allowances.

(54) Leftover allowances from the free allocation buffer established in Article 10a(5a) of Directive 2003/87/EC should be used to support the Innovation Fund and to support the scale-up and roll-out of more mature technologies in energy-intensive industries through the Investment Booster and the second phase of the Industrial Decarbonisation Bank. Where the allowances available are not sufficient to allocate 400 million allowances to the Investment Booster, these should come from the leftover allowances from the new entrants reserve provided for in Article 10a(7) of Directive 2003/87/EC. To ensure that the size of the new entrants’ reserve is sufficient for the upcoming

phase of the EU ETS, it should be allocated allowances from the phase-out of free allocation due to the phase-in of carbon border adjustment mechanism (CBAM) and allowances should not be returned to the MSR.

(55) To avoid penalising new entrants and therefore limiting possible decarbonisation investments, it is appropriate to delete the application of the linear reduction factor to allocations to new entrants under Article 10a(7) of Directive 2003/87/EC.

(56) To ensure the correct implementation of rules related to the allocation of allowances and equal treatment of operators and to prevent windfall profits, it should be clarified that competent authorities are under an obligation to require the operator to return any excess allowances and to instruct the national administrator to transfer returning excess allowances to the EU Allocation Account.

(57) In accordance with the commitment set out in Article 4(5), point (m) of Regulation (EU) 2021/1119, and considering a slower phase-out pathway for free allocation of allowances from 2028 onwards to support decarbonisation, investment and employment in the Union, while minimising the risk of carbon leakage, additional conditional free allocation should be provided for CBAM sectors. To provide for this in a manner that is compliant with international trade rules and takes into account the decarbonisation of installations in the Union, while minimising additional administrative burden, it is appropriate to reduce the phase-out of free allocation in those sectors, with free allocation being phased out fully by the end of 2037. In view of ensuring an achievable phase-in of CBAM factor in free allocation to CBAM goods that will be newly included as a result of future revisions of Regulation (EU) 2021/1119, it is appropriate to provide for specific phase-out rates for those new CBAM goods, applying as of the five-year period for free allocation that starts after their inclusion in the scope of Annex I to that Regulation. In line with this Directive introducing investment conditionality rules for free allocation in the EU ETS from 2031 onwards, those conditionality rules should apply from 2031 onwards also for free allocation to installations to which the CBAM factor is applied.

(58) To maintain adequate protection against the risk of carbon leakage, transitional measures to support certain energy intensive industries in the event of carbon leakage should continue applying until 31 December 2040, except where specific phase-out provisions apply. Free allocation to district heating should be phased out by equal amounts starting in 2030 in view of achieving zero free allocation in 2040.

(59) Achieving the EU’s 2040 climate target necessitates urgent and deep emission reductions in industry, particularly in energy-intensive sectors, where progress has thus far relied predominantly on energy efficiency gains rather than transformative decarbonisation. At the same time, to drive industrial transition substantial investments are required. Yet, the existing carbon price signal, even when combined with regulatory measures on renewables and energy efficiency, has proven insufficient to incentivise industrial decarbonisation investments, thereby justifying the allocation of allowances to a dedicated EU-level funding instrument, the Industrial Decarbonisation Bank, designed to bridge this gap and accelerate industrial decarbonisation, including through electrification, and enhance Europe’s competitiveness. Member States should be allowed and encouraged to make additional contributions from ETS allocations and related revenues to the Bank to further accelerate industrial decarbonisation in line with national priorities.

(60) The Innovation Fund should continue to support innovative low-carbon technologies across all eligible sectors, including those covered by the CBAM, to ensure that

breakthrough solutions reach commercial scale, bridging the gap between demonstration and market readiness in the transition. It should therefore continue to focus on innovation, supporting early-stage, high-risk technologies, while the Industrial Decarbonisation Bank (IDB) should support the scale-up and roll-out of more mature technologies in energy-intensive industries while building resilient value chains and contributing to energy system integration. Electrification will be a prime decarbonisation pathway as outlined in the Electrification Action Plan. Alignment with the requirements of the Net-Zero Industry Act and the Industrial Accelerator Act, including regarding EU content, as well as circular economy principles, should be ensured. With its comprehensive approach from abatement to transformation and its more focused sectoral scope, the Industrial Decarbonisation Bank should support both the decarbonisation of existing installations and the deployment of new low-carbon or zero-emission production capacity, including processes that substitute carbon-intensive industrial products or methods, also by bio-based material, products and methods, and as such can also result in the generation of permanent carbon removals. In this context, also combustion activities below 20 MW should be able to benefit from the support. In order to preserve the Union's capacity to support the development, scale-up and deployment of innovative low-carbon technologies, it is necessary to ensure that the overall financial means expected for the Innovation Fund remain available. 50 million allowances from the free allocation buffer up to 2030 were envisaged to contribute to the financing of the Innovation Fund, thereby providing an essential planning assumption for the timely preparation and implementation of projects towards the end of this decade. By 2028, the Innovation Fund should have committed almost all of its available resources and continued support for such projects requires timely replenishment from the Member States' auction volume and a predictable funding basis, notably where, due to the operation of the rules on free allocation, part of the allowances originally envisaged from the free allocation buffer available for the Innovation Fund would no longer be available for that purpose.

(61) The first phase of the Industrial Decarbonisation Bank should be the ETS Investment Booster financed by 400 million allowances. To fast-track decarbonisation investments through speed, the ETS Investment Booster, operating on a 'first in, first served' basis, should provide fixed carbon premia per tonne of CO_2 avoided and paid in ETS allowances. It should also ensure solidarity by ringfencing allowances for Member States facing higher investment challenges due to lower income or greater abatement needs. Administratively set fixed carbon premia, should ensure economically attractive returns, compensate for commercial risks, and secure additional private financing, while requiring strict completion deadlines and guarantees thereby enhancing business certainty upfront and enabling faster implementation. In order to ensure the best value for money, the Commission should develop Terms and Conditions for differentiated decarbonisation pathways, setting inter alia the fixed carbon premium rate per tonne of CO_2 avoided, based on a funding gap analysis using the best available knowledge regarding the specific type and cost of the technologies supported as well as taking into account the need to ensure the proportionality of the support. The Commission should periodically assess those Terms and Conditions in the light of the experience gained and market developments.

(62) The Investment Booster should be followed by a second phase whereby the Industrial Decarbonisation Bank would continue to support the scale-up and roll-out of mature decarbonisation technologies for energy-intensive industries, including through guaranteeing a level of the carbon price, thereby de-risking investments and ensuring

long-term revenue stability for decarbonisation efforts through mechanisms such as Carbon Contracts for Difference (CCfDs) or fixed carbon premia , disbursed upon verified GHG abatement, and accelerating industrial decarbonisation. In implementing the Industrial Decarbonisation Bank phase 2, the Commission should strive to ensure effective, quality-based geographical coverage across the Union. To boost Europe's industrial decarbonisation and turn every euro into investment early-on, the Industrial Decarbonisation Bank must move fast. Once the Investment Booster has fully deployed its allowances, the Industrial Decarbonisation Bank should open Phase 2, ensuring continued firepower for industrial decarbonisation well before 2031.

(63) To ensure coherent and reinforced support for industrial decarbonisation, enhancing both climate and competitiveness objectives, the Commission should maximise synergies between the Industrial Decarbonisation Bank (IDB) and the European Competitiveness Fund (ECF). To this end, the proposed 'competitiveness seal' should be awarded to projects fulfilling all requirements for support under the Industrial Decarbonisation Bank, thereby streamlining access to complementary funding.

(64) The Modernisation Fund plays a critical role in ensuring fairness and solidarity by supporting lower-income Member States in their transition to a climate-neutral economy. To enhance its effectiveness and align it with the Union's 2040 framework targeted adjustments are necessary. Sized at 2,0% of the overall ETS cap, it will ensure a balanced allocation of resources, optimising support where it is most needed while reflecting the evolving economic capacities of Member States. To accelerate industrial decarbonisation required to meet the 2040 climate target, an additional 0.5% of the ETS cap should be allocated to beneficiary Member States through the Industrial Decarbonisation Bank. Together with an expanded scope, this will provide financial support to a broader range of innovative, scalable solutions critical to reducing emissions in energy-intensive industries and power generation, including CCS and CCU and electrification, while ensuring efficient use of auction revenues. In addition, allowances available to the Modernisation Fund beneficiaries via 10% redistribution for reasons of solidarity should be channeled through the Modernisation Fund to maximise their impact. For the same reason, the other Member States benefitting from the 10% solidarity redistribution should use those allowances for priority areas for spending of auction revenues. Member States should further be permitted to voluntarily transfer additional allowances from their auction volumes to the Modernisation Fund, enhancing their flexibility to direct resources toward impactful decarbonisation efforts. The eligibility criteria and distribution key should be updated based on the latest available data (2022–2024), including a 75% GDP per capita threshold and emissions intensity. This will reflect current economic and emissions data, ensuring that the Member States with the greatest transition needs continue to benefit. The Modernisation Fund's scope should be broadened to further facilitate industrial decarbonisation, including, where relevant, support for investments in CCS, CCU, electrification and production of affordable low-carbon fertilisers. In order to protect the financial interests of the Union, support under the Modernisation Fund should be implemented in accordance with Regulation (EU, Euratom) 2020/2092[25].

(65) This Directive should include strong safeguards concerning the principles of the rule of law as set out in Article 2(a) of Regulation (EU, Euratom) 2020/2092 of the European Parliament and of the Council to protect the resources of the Modernisation

[25] Regulation (EU, Euratom) 2020/2092 of the European Parliament and of the Council of 16 December 2020 on a general regime of conditionality for the protection of the Union budget (OJ L 433I, 22.12.2020, p. 1).

Fund. Should there be breaches of these principles, appropriate measures should be taken, applying the procedure set out in Article 6 of Regulation (EU, Euratom) 2020/2092.

(66) In line with Article 28b(3) of Directive 2003/87/EC, the extension of the geographic scope of application of the EU ETS in respect of aviation activities should be accompanied by the possibility for aircraft operators to deduct costs incurred from Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) offsetting on extra-European routes from the EU ETS surrender obligation, in order to avoid double charging. Harmonised rules should apply in relation to such deductions, and therefore, for the calculation of the deduction the values of credits and allowances published in a Carbon Market Report adopted pursuant to Article 10(5) of Directive 2003/87/EC should be used. The value of credits eligible under Article 11a should be based on the best available price indices.

(67) The geological storage of CO_2 in secure, permanently monitored sites is essential to enabling large-scale emissions reductions for industry. Proximity and accessibility of storage sites in third countries to EU industrial hubs could reduce transportation costs, minimise leakage risks and accelerate the deployment of CCS compared to more distant or less developed storage options, thereby facilitating this decarbonisation pathway for EU industry. However, storage in third countries should be only recognised when sufficient safeguards regarding monitoring, reporting, verification (MRV) and with respect to the rules set out in Directive 2009/31/EC exist; with a linked system to the EU ETS pursuant to Article 25 on a reciprocal basis as from 2031 and providing the sites are not used for enhanced oil or gas recovery.

(68) Under the current EU ETS framework, CO_2 emissions are accounted at the point of capture (upstream), meaning that installations capturing CO_2 must surrender allowances for the full volume of emissions generated, except where the CO_2 is permanently stored geologically or in products. This does not contribute to achieving the objectives of the EU's Industrial Carbon Management strategy, which seeks to scale up CCU as a key decarbonisation pathway for hard-to-abate sectors like cement, steel, and chemicals and to ensure the availability of alternative carbon feedstocks. The inclusion of waste incineration means that most stages of the life of a product in which captured carbon is used are subject to carbon pricing, allowing the accounting of emissions to be moved at the point of their release from products into the atmosphere without a high risk of under accounting. As a result, in those cases where carbon dioxide is captured and used in intermediate or final products from which the carbon is expected to be re-emitted in activities already covered by the EU ETS, such as synthetic fuels, chemicals, or other industrial feedstocks, the obligation to surrender allowances should be deferred—rather than eliminated—until the CO_2 is released in a process listed in Annex I (downstream). Conversely, when CO_2 is used directly without binding its carbon chemically in a product, it should continue to be accounted upstream at the point of capture as the eventual release of that CO_2 will take place outside of the EU ETS, in agri-food, pharmaceuticals, fire extinguishers or other similar applications. The point of accounting of captured carbon embedded in synthetic fuels should take place when these are distributed (midstream), instead of at point of combustion of synthetic fuels in industrial facilities or in the transport sector. To ensure complete coverage of all carbon dioxide emissions of the carbon capture and utilisation chain, the ETS scope should be extended to the capture of carbon for use, captured carbon processing, liquefaction and similar services, and the transport of captured carbon for use, except for CO_2 for direct utilisation The Commission should

be empowered to establish a list of those CCU applications from which the carbon is expected to be re-emitted in activities already covered by the ETS. In addition, the permanent capture of carbon dioxide in physical objects that are not products, should also be recognised. Due to the uncertainty regarding the end-of-life treatment each of type of utilisation, the Commission should also be empowered to establish de minimis thresholds for the risk of remission outside of the EU ETS and may introduce measures, such as partial surrender requirements, to address cases where the near threshold is exceeded.

(69) Emissions from municipal waste incineration installations are substantial and have been subject to a monitoring, reporting and verification obligation since 2024, with a requirement to assess by 31 July 2026 the feasibility of its full inclusion in the EU ETS. On the basis of this assessment, it is considered appropriate and feasible to amend Directive 2003/87/EC to include emissions from municipal waste incineration installations in the EU ETS. The extension of the EU ETS to municipal waste incineration, as part of a comprehensive approach with strengthened circular economy policies under Regulation (EU) […./..] of the European Parliament and of the Council Circular Economy Act[26] and complemented with enabling conditions, incentivises economy-wide decarbonisation, circularity of materials and carbon, and a level playing field within and between sectors. As such, the inclusion of municipal waste incineration in the EU ETS contributes to the ambitions set out in the Competitiveness Compass and the Clean Industrial Deal to decarbonise the economy, accelerate the transition to more circularity, and establish a clear link between incentives for decarbonisation and circularity, increasing the EU’s economic security, resilience and competitiveness. The carbon price signal complements circular economy policies by financially incentivising and supporting the business case for carbon capture as a main decarbonisation pathway for the sector towards the 2050 economy-wide climate neutrality objective, reducing fossil emissions from incineration while fostering permanent carbon removals from biogenic emissions, supporting economy-wide decarbonisation. The carbon price signal on incineration further reinforces the business case for more circularity of materials, reducing GHG emissions from waste disposal and generating recycled materials displacing more carbon-intensive virgin materials. Furthermore, an extension of the EU ETS levels the playing field for industrial installations and clean energy production by harmonising the carbon price signal with co-incineration, power generation and district heating production already covered under the EU ETS.

(70) The carbon price signal and circular economy policies are mutually reinforcing. The hierarchical principles of waste management, as established in the EU Waste Framework Directive 2008/98/EC[27], prioritise prevention, reuse, recycling, and recovery over disposal, including incineration, and emphasise the need to reduce the environmental impact of waste at every stage of its lifecycle. The carbon price will complement regulatory and fiscal policies with a harmonised incentive and support for waste management in line with the higher steps of the waste hierarchy through improved waste prevention, preparing for reuse, separate collection, sorting and recycling. More circularity in turn reduces GHG emissions from waste management and displaces more carbon-intensive virgin materials. However, carbon emissions generated during the incineration of waste are not solely determined by the

[26] [OJ reference to be added once adopted].

[27] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

incineration process and the pre-treatment carried out by operators. These emissions are also influenced by upstream activities, including the availability and utilisation of recycling, reuse, and composting infrastructure; the effectiveness of separate collection schemes for recyclable and recoverable materials; the extent of separation at source by households, commercial actors, and public authorities; the consumption patterns of products and materials; and the design and lifespan of goods. Therefore, complementary waste policies under Regulation (EU) […./..] [Circular Economy Act] will contribute to ensure a comprehensive approach by stimulating the single market and demand for secondary materials and circular products, supporting investment in recycling capacity, reducing the landfilling and incineration of used raw materials, and rolling-out upstream producer-oriented policies such as eco-design requirements and strengthened Extended Producer Responsibility.

(71) A new activity for waste incineration and co-incineration should be established in Annex I. The installations covered by the scope of this activity should be defined in line with the definition of waste incineration plants and waste co-incineration plants in Directive 2010/75/EU of the European Parliament and of the Council, for non-hazardous waste. This new activity includes emissions from co-incineration, which were already covered by Directive 2003/87/EC as part of the activity 'Combustion of fuels'[28], so that the incineration and co-incineration of waste can be part of a single activity. In addition, units for the incineration of municipal waste should be included in the greenhouse gas emission permits of an EU ETS activity. To this end, the current exemption of such units should be deleted in point 5 of Annex I to Directive 2003/87/EC. The recovery of waste through chemical recycling activities, including thermal treatment processes such as pyrolysis or gasification, is not covered by the extension of the scope of the EU ETS to the extent that the substances resulting from the treatment are not subsequently incinerated. To ensure regulatory consistency, accommodate the specific characteristics of waste as a feedstock, and promote environmental integrity through robust and comprehensive coverage avoiding threshold effects from diversion to smaller, less efficient installations, the capacity threshold for this activity should be aligned with Annex I, point 5.2.(a) of Directive 2010/75/EU as installations with a capacity exceeding 3 tonnes per hour . Implementing Regulation (EU) 2018/2066 should be reviewed and updated accordingly regarding the monitoring and reporting rules for emissions from municipal waste incineration installations.

(72) Hazardous waste incineration, meaning incineration or co-incineration plants predominantly treating hazardous waste, should remain excluded from the EU ETS as the carbon price signal is not expected to incentivise cost-effective decarbonisation. The strict regulatory, technical and operational requirements limit alternative treatment options for hazardous materials that cannot be safely recycled, recovered, or treated by other means. In addition, operators do not have significant opportunities for permanent carbon removal generation due to the limited share of biogenic carbon in hazardous waste streams. The risk of municipal waste diversion to hazardous waste incineration installations is constrained by the prevailing regulatory framework, technical and operational differences in the incineration process, and the associated high incineration cost for hazardous waste incineration.

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28 In line with the interpretation of the Commission set out in *Guidance Document No. 0: Guidance on Interpretation of Annex I of the EU ETS Directive (excl. aviation and maritime activities)*: https://climate.ec.europa.eu/document/edc93136-82a0-482c-bf47-39ecaf13b318_en.

(73) To ensure a smooth transition of the sector in the EU ETS, the surrendering of allowances by municipal waste incineration installations that become subject to the system from 2031 onwards should be gradually introduced with respect to verified emissions reported for the period 2031 to 2034. This staged integration should not apply to installations currently already included in the EU ETS. Several reasons support a staged integration of the compliance obligation rather than immediate full inclusion. The start from 2031 allows for technical and administrative preparation, in particular for the development of monitoring and reporting rules that are better tailored to municipal waste incineration, including the distinction of biomass and fossil emissions. The start from 2031 combined with the phase-in allows planning and investment predictability for operators and local authorities, including for the adjustment of contractual arrangements between local authorities and incinerators. It also enables prior investment support, including through ETS revenue use, in abatement measures for installations and local authorities. Phasing-in surrender obligations for municipal waste incineration also contributes to the convergence towards the landfilling target established in Article 5(5) of Directive 1999/31/EC[29] while allowing to strengthen complementary circular economy policies at EU, national and local level to support waste prevention, reduction, collection, sorting and recycling and address landfilling, avoiding any unintended consequences in terms of waste diversion contrary to the waste hierarchy. To protect the environmental integrity of the system, the number of allowances added to the cap in respect of the sector should be proportionate to the gradually increasing surrender obligation for those years. The figures relating to the inclusion of municipal waste incineration should be derived from the data monitored and reported for the sector under Directive 2003/87/EC for 2024 in the Union and the States of the EEA and the EFTA), adjusted, from 2024 until 2031, by projections for estimated reporting data and capacity developments. The number of allowances added to the total Union-wide quantity of allowances in respect of the sector should be commensurate to the phase-in trajectory from 2031 to 2034, equivalent to 25% of that total number in 2031, 50% of that total number adjusted by the linear reduction factor in 2032, 75% of that total number adjusted by the linear reduction factor in 2033, and 100% of that total number adjusted by the linear reduction factor as of 2034. As from 2035, municipal waste incineration installations should surrender the number of allowances corresponding to all of their verified emissions reported in the preceding year.

(74) To further ensure a smooth transition, where a Member State has equivalent measures in place that achieve the objectives for including municipal waste incineration in Directive 2003/87/EC, a temporary opt-out possibility should be introduced until the end of 2035. To ensure compatibility with decarbonisation, material and carbon circularity and a level playing field, the option of applying that derogation should be available only where a Member State can demonstrate it meets at least two out of the following three conditions: having an equivalent national carbon tax in place with a tax rate higher than the average auctioning price for the relevant year; it is on track to achieve the EU municipal waste recycling targets under Article 11(2)(d) and (e) of Directive 2008/98/EC; and it is on track to achieve the municipal waste landfill target under Article 5(5) of Directive 1999/31/EC. To ensure stability and transparency of the system, the request, including the relevant information to demonstrate compliance

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[29] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3–30 (ELI: http://data.europa.eu/eli/dir/2008/98/oj)

with at least two out of the three conditions, should be notified to the Commission by 31 July 2029. The temporary nature of this derogation is important to ensure compatibility with moving the accounting of emissions where carbon dioxide is captured and used in intermediate or final products (CCU) to the point of their release from products into the atmosphere while preventing a high risk of underaccounting.

(75) Taking into account the special characteristics and permanent constraints of the outermost regions of the Union as recognised in Article 349 of the Treaty on the Functioning of the European Union (TFEU), and given their constraints in deploying a comprehensive waste-management ecosystem at scale and distance from recycling markets, an option is provided for Member States to temporarily exempt installations located in the outermost regions from the surrender obligation for waste incineration and co-incineration pursuant to Directive 2003/87/EC.

(76) To drive meaningful behavioural change at all stages of the waste value chain and ensure the effectiveness of the carbon price in fostering circularity and decarbonisation, it is important that the price signal is reflected in pricing mechanisms and channelled through targeted measures and policies with a positive steering effect offering households and non-residential actors both an incentive and a choice to avoid the cost of mixed waste disposal through waste prevention, reduction and sorting. Such measures with a proven positive impact on waste reduction, sorting and recycling include, for example, modulated gate fees, Pay-As-You-Throw, weight-based and smart bin collection schemes, deposit return schemes, or mandatory separate collection schemes for specific waste streams. Those measures should be complemented by reinforced upstream application of the polluter pays principle through measures such as strengthened harmonised Extended Producer Responsibility schemes and eco-design requirements. Member States should use revenues from emissions trading to support competent authorities, in particular local authorities, involved in the collection and disposal of municipal waste in the implementation of those circular economy measures, in order to steer waste disposal in line with the waste hierarchy, manage the impacts for households, and ensure a smooth transition for the waste sector, balancing environmental benefits and circularity with the cost of waste management as a public service.

(77) The extension of the carbon price to municipal waste incineration should be accompanied by effective measures to continue reducing landfilling and avoid unintended consequences in terms of waste diversion contrary to the waste hierarchy. This risk is mitigated by the fact that sustainable biomass emissions from incineration are zero-rated, limiting the incentive for organic waste diversion to landfilling -where it is the main source of methane- to avoid having to pay the carbon price. However, a risk of diversion of fossil-based material remains where no effective regulatory or fiscal landfill policies are in place. Therefore, effective and reinforced implementation and enforcement of policies and measures to limit the share of municipal waste landfilled to 10% or less by 2035 as established in Directive 1999/31/EC is essential. Furthermore, monitoring and reporting, as well as verification and accreditation of emissions from landfilling of municipal waste should be developed in the future to monitor the development of methane emissions following the full extension of the EU ETS to emissions from municipal waste incineration. Uncertainty in the quantification of emissions from landfills remains high. Harmonised monitoring and reporting frameworks to collect standardised, robust and verified emissions data should therefore first be established to ensure a high degree of integrity in the system. The development of accurate monitoring and reporting rules is conditional on the

development, first, of the future Best Available Techniques for Landfills to ensure environmental integrity, regulatory consistency and the use of advanced monitoring tools, including measurement and modelling methods, and second, of a comprehensive landfill register or registers to avoid circumvention and ensure its effectiveness. For this purpose, the Commission should report by 31 July 2029 whether these enabling conditions have been fulfilled for the MRV to be developed by 2031 at the point of the start of the phase-in of municipal waste incineration. In case one of these conditions have not been fulfilled, the extension of the EU ETS to landfills for MRV should be postponed from 2031 to 2034, at the point of full integration of municipal waste incineration, to allow additional time for these conditions to be fulfilled. The Commission should review Directive 2003/87/EC by 31 December 2034 in light of these developments and any unintended consequences.

(78) Carbon can be captured for storage and utilisation in installations that have emissions resulting from a mix of fossil and zero-rated sources, such as from the combustion of sustainable biomass, which is zero-rated in the EU ETS. As CO_2 from zero-rated sources and from fossil sources are treated different for the purposes of determining the compliance obligations of EU ETS, generating removals or in the production of synthetic fuels, it is necessary to establish detailed rules regarding the order of which the different types of CO_2 are considered to be captured and how to account for their emissions across the carbon capture, transport, utilisation or storage chain.

(79) In order to ensure a proper functioning and management of the EU ETS, it is appropriate to allocate to the Commission up to 5 million allowances from the Union-wide quantity of allowances. In line with the increased number of users and the increased coverage of the EU ETS, the growing value of allowances held in the Union Registry and the increased security challenges, those revenues should in particular be used to ensure the proper functioning, management and security of the Union Registry. In line with the increased coverage of the EU ETS and changes introduced by this Directive, it is appropriate to ensure that those revenues may be used for other aspects of ensuring the proper functioning and management of the EU ETS, including on implementing the rules on investment conditionality for free allocation, and operation of the facility for the purchase of high quality and high integrity international credits. Conditions, modalities and procedures concerning the use of those revenues should be detailed by the Commission in delegated acts.

(80) For coherence with the treatment of emissions from biomass that complies with the sustainability criteria and greenhouse gas emission-saving criteria for the use of biomass established by Directive (EU) 2018/2001 of the European Parliament and of the Council[30], and other zero-rated emissions in the EU ETS, carbon dioxide captured from the atmosphere or from sources with an emission factor of zero, should also have an emissions factor of zero when released in an activity in the EU ETS. For coherence with the treatment of emissions from biomass that that complies with the sustainability criteria and greenhouse gas emission-saving criteria for the use of biomass established by Directive (EU) 2018/2001 of the European Parliament and of the Council[31], and other zero-rated emissions in the EU ETS, carbon dioxide captured from the

30 Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, pp. 82–209, ELI: http://data.europa.eu/eli/dir/2018/2001/oj).

31 Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, pp. 82–209, ELI: http://data.europa.eu/eli/dir/2018/2001/oj).

atmosphere or from sources with an emission factor of zero, should also have an emissions factor of zero when released in an activity in the EU ETS. As an exception, that same CO_2 should be subject to a surrender obligation when the CO_2 is leaked, vented or otherwise released from a permanent geological storage site, as the CO_2 will have received a reward as a negative emission under Regulation (EU) 2024/3012, which relies on the EU ETS for the liability for reversals.

(81) In accordance with Article 28b(2) of Directive 2003/87/EC, the Commission assessedg the environmental integrity of the global market-based measure of the International Civil Aviation Organization (ICAO). That report showed that CORSIA has not been strengthened and that states listed in the implementing act adopted pursuant to article 25a(3) of the ETS Directive represent less than 70% of international aviation emissions. Therefore, in accordance with Article 28b(3) of Directive 2003/87/EC, the scope of the EU ETS should be extended in a non-discriminatory way to cover all flights departing from an airport situated in the EEA and landing in aerodromes in third countries, no further than 5 000 kilometres from the largest aerodrome in the geographical centre of the Union. All airlines on these routes should be treated equally. Moreover, the EU ETS support for alternative fuels and for action in relation to contrails should be available to all airlines on those routes. This scope of application is around half the maximum distance of flights from the centre of Europe, taking account of analysis which indicates such routes are most susceptible to potential hub leakage. This coverage should apply from 2029 rather than 2027, for a period of four years and be dependent on the review in 2032.

(82) Directive 2003/87/EC should be amended so that ICAO’s CORSIA scheme is implemented into EU law from 2026 until 2035, and to ensure that aviation as a whole contributes its fair share to addressing climate change in line the objectives of the Paris Agreement. Emissions from international aviation outside Europe were to be capped from January 2021 by global market-based action, and the European Parliament and Council set out conditions for considering whether that scheme is sufficient action to tackle climate change or should be supplemented. In 2032, when the results of the functioning of CORSIA in terms of offsetting will be apparent, a review should be undertaken to assess the implementation of CORSIA by the major countries in the aviation sector for whom this is mandatory according to the CORSIA rules laid down by ICAO. In the event that CORSIA is proving to be ambitious, efficient and successful, the scope of effective carbon pricing under the EU ETS should be reduced to flights within the EEA and departing to the UK, Switzerland, to and from Gibraltar and other countries taking advantage of ETS as a service.

(83) In order to limit additional stringency linked to the geographic extension of the scope of the EU ETS in respect of aviation activities and taking into account the fact that emissions stemming from aviation activities have been on an increasing trajectory it is appropriate to increase the total number of allowances available in respect of aviation activities in proportion to the emissions newly included in the scope, taking into account the latest available information on emissions, and to reserve from those allowances for additional support for reducing aviation’s climate impacts through sustainable aviation fuels, electrification and cost-effective reductions from contrails. The total number of allowances available in respect of aviation activities should nevertheless be reduced by an amount equalling the emissions deducted by aircraft operators from the surrender obligation to account for costs incurred by offsetting under CORSIA, because these emissions are no longer covered by the EU ETS.

(84) Lowering the threshold applicable to the exclusion of aircraft operators as laid down in Annex I to Directive 2003/87/EC leads to the additional inclusion of a number of smaller aircraft operators. To take into account the limited administrative capacity of such small aircraft operators, it is appropriate to increase the threshold for enabling the use of simplified reporting tools. The reporting tool provided by Eurocontrol has reached a high level of accuracy during the several years of application and continuous improvement since its introduction, accordingly it is capable of providing emission values for all aircraft operators concerned.

(85) The scope and definition of the activity "Production of hydrogen (H2) and synthesis gas with a production capacity exceeding 5 tonnes per day" under Annex I to Directive 2003/87/EC should be amended to solve recurring implementation questions and clarify the activity of production of hydrogen, also when solely produced as by-product, is covered whenever the threshold of a production capacity above 5 tonnes per day is exceeded.

(86) Emissions from flights operated by aircraft operators operating business aircraft have largely been exempted from the EU ETS because they generally operate fewer flights or emit less than the exclusion thresholds laid down in Annex I to Directive 2003/87/EC. Aircraft operators having yearly emissions on international flights less than 10.000t CO_2 are not subject to ICAO's CORSIA scheme and should therefore contribute through the EU ETS. In order to ensure that all aircraft operators contribute to climate action, it is therefore appropriate that the number of flights be no longer a criterion for the exemption from the EU ETS and the emissions threshold is reduced and simplified by having one single threshold for all types of aircraft operators. Nevertheless, in order to ensure that the additional administrative burden on competent authorities remain reasonable, it is appropriate to exempt aircraft operators with a very small level of emissions subject to the EU ETS surrender obligation, also taking into account the limited cumulative environmental benefit that their inclusion would lead to.

(87) The analysis carried out in the context of the Commission's review of the reserve show that a more gradual release of allowances from the reserve into the market in case of a shrinking market will mitigate the risk of creating price spikes in the market when the number of allowances in circulation is close to the lower threshold. A lower buffer parameter should be introduced from 2028 for a proportionate release of allowances when the total amount of allowances in circulation is between 400 hundred million allowances and 300 hundred million allowances.

(88) In order to take account of a shrinking emission trajectory and ensure that the reserve remains resilient to external shocks over time, the reference parameters of the market stability reserve should be updated for intakes and releases from the reserve to be proportionate to market developments. To that end, the upper threshold, lower threshold and corresponding buffers and the release quantity should be adjusted annually and reduced with 4 % to remain aligned with the evolution of the shrinking market.

(89) The analysis carried out in the context of the Commission's review of the reserve and the expected developments relevant to the carbon market indicate that the intake rate of 24 % has served its purpose and in view of the recent and future evolution of the market, this intake rate should return to 12%. To that end, the upper buffer threshold should be adjusted correspondingly.

(90) The calculation of the total number of allowances in circulation only considers data related to stationary installations until 31 December 2023. To take account of historic demand for allowances by aviation in the period between 1 January 2012 and 31 December 2023, the annual calculation of the total amount of allowances should be adjusted to reflect the cumulative demand from the aviation sector over this period.

(91) Since the objectives of this Directive, namely to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient way in a manner commensurate with the economy-wide net greenhouse gas emission reduction target for 2040 through an extended and amended Union wide market-based mechanism, cannot be sufficiently achieved by the Member States but can rather, by reason of its scale and effects, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

(92) In order to ensure uniform conditions for the implementation of Articles 4 to 7 of Directive 2003/87/EC concerning the granting, suspension and withdrawing of greenhouse gas emissions permits by competent authorities, Article 10a(3b) to (3d) of Directive 2003/87/EC on the decarbonisation investment in the EU conditionality rules for free allocation concerning the format and content of the Invest in EU decarbonisation plans,implementing powers should be conferred on the Commission. In addition, to ensure uniform conditions for the implementation of the reservation and allocation mechanism pursuant to Article 3gaa of Directive 2003/87/EC as regards the non-Union ports and third countries in respect of which a derogation from the origin requirements should apply, implementing powers should be conferred on the Commission. The implementing powers conferred on the Commission pursuant to Article 14 of Directive 2003/87/EC should be extended to establish the order of capture accounting of emissions from captured CO_2 from a mix of zero-rated and non-zero-rated sources, and to the accounting of emissions from synthetic fuels, to ensure that emissions are accounted for and that double counting is avoided. In addition, the implementing powers conferred on the Commission pursuant to Article 3ga(2) should be extended in order to take into account the changes to the measure that aims to further limit the risk of evasive port calls and relocation of container transhipment activities. Those implementing powers be exercised in accordance with Regulation (EU) No 182/2011.

(93) In order to adopt non-legislative acts of general application to supplement or amend certain non-essential elements of a legislative act, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission in respect of supplementing the decarbonisation investment in the EU conditionality rules for free allocation in Article 10a(3b) to (3d) of Directive 2003/87/EC, with regards to the detailed conditions to form a pool rules on pooling under Article 10a(3d) and the repartition of liability between operators in that case, the detailed conditions for the derogations set out in the fifth and sixth subparagraphs of Article 10a(3c), the detailed timeline for the submission of the Invest in EU decarbonisation plans, the qualification as decarbonisation investments, the qualification as significant emissions reduction, and the determination of the economic value of the quantity of free allowances. In addition, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission in respect of supplementing Article 9c of Directive 2003/87/EC on the modalities for the purchase of carbon removals and auctioning of

the corresponding allowances, and to supplement Articles 10cb, 10cc, 10cd and 10ce of Directive 2003/87/EC on the operation of the Innovation Fund and the Industrial Decarbonisation Bank. Moreover, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission in respect of supplementing Article 19 of Directive 2003/87/EC with regards to the conditions, modalities and procedures under which the Central Administrator makes use of revenues from the auctioning of allowances to cover expenses linked with the functioning and management of the EU ETS. The power to adopt such acts should also be delegated on the Commission to supplement Article 12(3b) concerning the requirements for considering that greenhouse gases have become permanently chemically bound or chemically bound and determine measures to address the risk of loopholes. The power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission to supplement Article 3gaa of Directive 2003/87/EC in respect of the detailed rules necessary for the application of the reservation and allocation of allowances for the use of sustainable maritime fuels and zero-emission propulsion technologies, as well as Article 3gab. In addition, the power to adopt the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to supplement Article 25b of Directive 2003/87/EC in respect of the rules on the operation of ETS as a service and to amend Article 3ga(1) of that Directive in respect of the coverage of the remaining emissions released during a voyage between a port of call under the jurisdiction of a Member State and a port of call under the jurisdiction of a third country to which ETS as a service is provided. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making[32]. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

(94) The provisions relating to the amendment to Article 3(h) and the introduction of Article 6(4) and Article 10a(4d) of Directive 2003/87/EC should apply from 1 January 2028 to clarify the rules on permitting and the corrections in case of excess free allocation as early as feasible. Consequently, Member States should transpose the provisions relating to those articles by 31 December 2027. The deadline for transposing the remaining provisions of this Directive should be 31 December 2028, to provide sufficient time for orderly implementation. In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents[33], Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.

(95) To ensure clarity already in the ongoing period, Members States should transpose the provisions clarifying existing rules in line with their implementation and the practice by 1 January 2028. This concerns the provisions clarifying and aligning rules with the

[32] OJ L 123, 12.5.2016, p. 1, ELI: http://data.europa.eu/eli/agree_interinstit/2016/512/oj.

[33] Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents (2011/C 369/02).

practice as regards the definition of a new entrant in Article 3, point (h), Article 6(4) clarifying the treatment of installations to which a greenhouse emissions permit is successively granted for the first time, withdrawn and a new permit is granted during the same five-year period for free allocation and after the submission of the list referred to in Article 11(1) for that period, and Article 10a(4d) of Directive 2003/87/EC as regards returning excess allowances.

(96) To ensure timely availability of the corresponding funds, the provisions amending Articles 10a(5b), 10a(7) and inserting a new Article 19(1a) should start applying on 30 September 2027. Those provisions concern, respectively, the use of any remaining quantity of allowances from the additional amount of up to 3 % of the total quantity of allowances referred to in Article 10a(5a), the allowances that should be set aside for new entrants and the provision enabling the Commission to use allowances from the Union-wide quantity of allowances to cover expenses linked with the functioning and management of the EU ETS. To ensure timely adjustment, the provision amending Article 10a(1a) of Directive 2003/87/EC concerning the CBAM factor should also apply from 30 September 2027 onwards.

(97) Directive 2003/87/EC and Decision (EU) 2015/1814 of the European Parliament and of the Council[34] should therefore be amended accordingly,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Amendments to Directive 2003/87/EC

Directive 2003/87/EC is amended as follows:

(98)

(1) in Article 2, the first subparagraph is replaced by the following:

‘1. This Directive shall apply to the activities listed in Annexes I and III, and to the greenhouse gases listed in Annex II. Where an installation that is included within the scope of the EU ETS due to the operation of combustion units with a total rated thermal input exceeding 20 MW changes its production processes to reduce its greenhouse gas emissions and no longer meets that threshold, the Member State in which that installation is situated shall provide the operator with the options of remaining within the scope of the EU ETS until the end of the current and the two following five-year periods referred to in Article 11(1), second subparagraph, following the change to its production processes. The operator of that installation may decide that the installation is to remain within the scope of the EU ETS until the end of the current five-year period only, the end of the next five-year period only following the change to its production processes, or the end of the following two five-year periods following the change to its production processes. The Member State concerned shall notify the Commission of changes compared to the list submitted to the Commission pursuant to Article 11(1).’;

(2) Article 3 is amended as follows:

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[34] Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, p. 1, ELI: http://data.europa.eu/eli/dec/2015/1814/oj).

(a) point (e) is replaced by the following:

'(e) 'installation' means either of the following:

(i) a stationary technical unit where one or more activities listed in Annex I are carried out and any other directly associated activities which have a technical connection with the activities carried out and which could have an effect on emissions and pollution;

(ii) a CO2 transport infrastructure as defined in Article 3(29) of Regulation (EU) 2024/1735 of the European Parliament and of the Council* that carries out the activity of transport of carbon dioxide listed in Annex I;

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* Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (OJ L, 2024/1735, 28.6.2024, ELI: http://data.europa.eu/eli/reg/2024/1735/oj).'

(b) point (h) is replaced by the following:

'(h) 'new entrant' means any installation carrying out one or more of the activities listed in Annex I or an activity included in the EU ETS in accordance with Article 24, which has obtained a greenhouse gas emissions permit for the first time within the period starting from three months before the date for submission of the list under Article 11(1), and ending on 31 December of the last year in the corresponding five-year period for free allocation referred to in Article 11(1);';

(c) point (o) is replaced by the following:

'(o) 'aircraft operator' means the person who operates an aircraft at the time it performs an aviation activity listed in Annex I or, where that person cannot be identified, the entity charged for air navigation service charges pursuant to Article 32 of Regulation (EU) 2024/2803 of the European Parliament and the Council*, or ultimately the owner of the aircraft;

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* Regulation (EU) 2024/2803 of the European Parliament and of the Council of 23 October 2024 on the implementation of the Single European Sky (OJ L, 2024/2803, 11.11.2024, ELI: http://data.europa.eu/eli/reg/2024/2803/oj).';

(d) point (p) is deleted;

(e) point (z) is replaced by the following:

'(z) 'port of call' means either of the following:

(i) for ships transporting for commercial purposes cargo or passengers, the port where a ship stops to load or unload cargo or to embark or disembark passengers; stops for the sole purposes of refuelling, obtaining supplies, relieving the crew of a ship, going into dry-dock or making repairs to the ship, its equipment, or both, stops in port because the ship is in need of assistance or in distress, ship-to-ship transfers carried out outside ports, stops for the sole purpose of taking shelter from adverse weather or rendered necessary by search and rescue activities, and stops of containerships in a neighbouring container transhipment port listed in the implementing act adopted pursuant to Article 3ga(2) are excluded;

(ii) for ships performing or supporting offshore operations in connection with an offshore worksite, the port where a ship stops to load or unload cargo or to embark or disembark passengers, or the offshore worksite where a ship performs or supports offshore operations; stops for the sole purposes of refuelling, obtaining supplies, relieving the crew of a ship, going into dry-dock or making repairs to the ship, its equipment, or both, stops in port because the ship is in need of assistance or in distress, ship-to-ship transfers carried out outside ports, stops for the sole purpose of taking shelter from adverse weather or rendered necessary by search and rescue activities, and stops of containerships in a neighbouring container transhipment port listed in the implementing act adopted pursuant to Article 3ga(2) are excluded;'

(f) in point (ag), the words 'for the purposes of Chapter IVa of this Directive' are deleted;

(g) the following points are added:

'(aj) 'hazardous waste' means hazardous waste as defined in Article 3, point (2) of Directive 2008/98/EC of the European Parliament and of the Council (*)

(ak) 'municipal waste' means municipal waste as defined in Article 3, point (2b) of Directive 2008/98/EC;

(al) 'synthetic fuels' means renewable fuels of non-biological origin as defined in Article 2, point (36) of Directive (EU) 2018/2001 and low-carbon fuels as defined in Article 2, point (13), of Directive (EU) 2024/1788 of the European Parliament and of the Council*;

(am) 'offshore operations' means activities in connection with the exploration, appraisal or exploitation of natural resources of the seabed and subsoil, or activities in connection with offshore installations or offshore infrastructure, but excluding the activities of maritime transport of oil and gas;

(an) 'offshore worksite' means the geographical area covered by an authorisation delivered by the competent authority for conducting offshore operations;

(ao) 'business flight' means a flight that is performed with a business aircraft included on the list adopted by the Commission pursuant to Article 3c(6).'.

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* Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, ELI: http://data.europa.eu/eli/dir/2008/98/oj)

* Directive (EU) 2024/1788 of the European Parliament and of the Council of 13 June 2024 on common rules for the internal markets for renewable gas, natural gas and hydrogen, amending Directive (EU) 2023/1791 and repealing Directive 2009/73/EC (recast) (OJ L, 2024/1788, 15.7.2024, ELI: http://data.europa.eu/eli/dir/2024/1788/oj).';

(3) Article 3c is amended as follows:

(a) paragraph 6 is replaced by the following:

‘6. For the period from 1 January 2024 until 31 December 2030, a maximum of 20 million of the total quantity of allowances referred to in paragraph 5 shall be reserved in respect of aircraft operators, on a transparent, equal-treatment and non-discriminatory basis, for the use of sustainable aviation fuels, and other aviation fuels that are not derived from fossil fuels, referred to in Article 4(1), second subparagraph, of Regulation (EU) 2023/2405 of the European Parliament and the Council* and for the use of electricity, for subsonic flights for which allowances have to be surrendered in accordance with Article 12(3) of this Directive and for which the fulfilment of that obligation is not considered to be satisfied pursuant to Article 28a(1) of this Directive. For business flights, the reserved amount shall be available only for the use of electricity. Where eligible aviation fuel cannot be physically attributed to a specific flight, the allowances reserved under this subparagraph shall be available for eligible aviation fuels uplifted in the EEA proportionate to the emissions from flights, except business flights, of the aircraft operator for which allowances have to be surrendered in accordance with Article 12(3) of this Directive and the fulfilment of that obligation is not considered to be satisfied pursuant to Article 28a(1) of this Directive. The same principle shall apply to defining the volume of fuels to which zero emission factor applies.

The allowances reserved under the first subparagraph of this paragraph shall be allocated by the Member States to cover part of or all of the price differential between the use of fossil kerosene and the use of the relevant eligible aviation fuels, taking into account incentives from the price of carbon and from harmonised minimum levels of taxation on fossil fuels. When calculating that price differential, the Commission shall take into account the technical report published by the European Union Aviation Safety Agency pursuant to Article 13(1) of Regulation (EU) 2023/2405. Member States shall ensure the visibility of funding under this paragraph in a manner corresponding to the requirements in Article 30m(1), points (a) and (b), of this Directive.

The allowances allocated under this paragraph shall cover:

(a) 50 % of the remaining price differential between the use of fossil kerosene and advanced biofuels as defined in Article 2, second paragraph, point (34), of Directive (EU) 2018/2001 of the European Parliament and of the Council **, for which the emission factor is zero under Annex IV to this Directive or under the implementing act adopted pursuant to Article 14 of this Directive;

(a) 60 % of the remaining price differential between the use of fossil kerosene and hydrogen from renewable energy sources, and drop-in renewable fuels of non-biological origin compliant with Article 25 of Directive (EU) 2018/2001, used in aviation, for which the emission factor is zero under Annex IV to this Directive or under the implementing act adopted pursuant to Article 14 of this Directive;

(b) 100 % of the remaining price differential between the use of fossil kerosene and any eligible aviation fuel that is not derived from fossil fuels covered by the first subparagraph of this paragraph, at airports situated on islands smaller than 10 000 km2 and with no road or rail link with the mainland and at airports located in an outermost region, where the physical delivery of the eligible aviation fuel, outside of a mass balance system, took place;

(c) until 31 December 2029, in cases other than those referred to in points (a), (b) and (c), 30 % of the remaining price differential between the use of fossil kerosene and any eligible aviation fuel that is not derived from fossil fuels covered by the first subparagraph of this paragraph.

(d) from 1 January 2027, the same number of allowances per megajoule (MJ) of electricity consumed as aircraft operators are entitled to receive pursuant to point (b) for the use of drop-in renewable fuels of non-biological origin, in case of electric or hybrid aircraft performing flights for which allowances have to be surrendered in accordance with Article 12(3).

Fuels shall be eligible for support referred to in this paragraph only if they are produced in the EEA, in a third country that has an emissions trading system linked with the EU ETS, or in a third country to which the Union provides support pursuant to Article 25b. Fuels referred to in the third subparagraph, points (a), (b) and (d), shall be eligible for a 10 percentage point increase in coverage if they are produced using feedstock that is sourced in the Union, in a third country that has an emissions trading system linked with the EU ETS, or in a third country to which the Union provides support pursuant to Article 25b.

The allocation of allowances under this paragraph may take into account possible support from other schemes at national, Union, or international level.

On a yearly basis, aircraft operators may apply for an allocation of allowances based on the quantity of each eligible aviation fuel referred to in this paragraph used on subsonic flights, with the exception of business flights, for which allowances have to be surrendered in accordance with Article 12(3) between 1 January 2024 and 31 December 2040, excluding flights for which that requirement is considered to be satisfied pursuant to Article 28a(1). On a yearly basis, aircraft operators may apply for an allocation of allowances in case of electric or hybrid aircraft using electricity or hydrogen for performing any flight for which allowances have to be surrendered in accordance with Article 12(3) until 31 December 2035.

If an aircraft operator demonstrates to the satisfaction of the Commission a binding long-term fuel supply contract for the fuels referred to in the third subparagraph, points (a), (b) and (e), which binds both the fuel supplier and the aircraft operator, and is valid for at least three years, the allowances covering the price difference for each year of the duration of the contract, for a maximum of five years, shall be reserved for that aircraft operator. The yearly allocation of the allowances for the use of the eligible fuels delivered under those contracts shall be done the same way as set out in the second to fourth subparagraphs. Allowances reserved under this point cannot exceed 10 million.

If, for a given year, the demand for allowances pursuant to this paragraph is higher than the availability of allowances, the quantity of allowances shall be reduced in a uniform manner for all aircraft operators concerned by the allocation for that year.

Significant reductions in climate impacts from contrails in the order of millions of tonnes of CO_2e may be incentivised through the yearly use of no more than

420 000 allowances. From the amount reserved pursuant to the first subparagraph, a total of up to 3 million allowances, available until 31 December 2033, shall be dedicated to the cost-effective reduction of climate impacts from contrails. Member States shall allocate allowances equal to 0,1 percent of the verified emissions of an aircraft operator, upon its request, which has embedded contrails forecasting models in its flight planning tools. In order to be eligible for this allocation aircraft operators shall make available the contrail forecasts to their operations control centre or equivalent, which shall be instructed to assess their operational viability and, if possible, to incorporate them when filing the corresponding flights. An additional amount equal to 0,02 percent of the verified emissions shall be allocated to aircraft operators, referred to in the first sentence of this subparagraph, for flights for which the aircraft operator uses flight trajectories and fuel flow as in-flight measured data for the given year to report non-CO_2 aviation effects pursuant to Article 14(5). The contrail forecasting models of aircraft operators referred to in the first sentence of this subparagraph shall use, as a basis, the same common reference numerical weather prediction model and weather data as the one used in the monitoring, reporting and verification tools provided by the Commission referred to in Article 14(5).

The Commission shall publish in the Official Journal of the European Union details of the average cost difference between fossil kerosene, taking into account incentives from the price of carbon and from harmonised minimum levels of taxation on fossil fuels, and the relevant eligible aviation fuels, on a yearly basis for the previous year.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive by establishing the detailed rules for the yearly calculation of the cost difference referred to in the sixth subparagraph of this paragraph, for the allocation of allowances for the use of the fuels identified in the first subparagraph of this paragraph as reported under the implementing act adopted pursuant to Article 14(1), and establishing the arrangements for taking into account incentives from the price of carbon and from harmonised minimum levels of taxation on fossil fuels. Those delegated acts may also lay down further rules and procedures for validation of contrail forecasting models and their inclusion in flight planning tools.

The Commission shall adopt implementing acts listing business aircraft(s), the flights performed by which aircraft are considered business flights. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

By 1 July 2032, the Commission shall carry out an assessment regarding the application of this paragraph and submit the results in a report to the European Parliament and to the Council. The report may, where appropriate, be accompanied by a legislative proposal to revise the amount reserved under this paragraph until 31 December 2040, taking into account changes to the geographic extent of flights subject to the surrender obligation laid down in Article 12(3), to continue incentivise the use of the fuels identified in the first subparagraph of this paragraph, in particular the use of renewable fuels of non-biological origin compliant with Article 25 of Directive (EU) 2018/2001, used in aviation, for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive.

From 1 January 2028, the Commission shall evaluate the application of this paragraph in the annual report it is required to submit pursuant to Article 10(5).

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* Regulation (EU) 2023/2405 of the European Parliament and of the Council of 18 October 2023 on ensuring a level playing field for sustainable air transport (ReFuelEU Aviation) (OJ L, 2023/2405, 31.10.2023, ELI: http://data.europa.eu/eli/reg/2023/2405/oj).

** Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82, ELI: http://data.europa.eu/eli/dir/2018/2001/oj).';

(ii) paragraph 8 is replaced by the following:

'8. By way of derogation from Article 12(3), Article 14(3) and Article 16, Member States shall consider the requirements set out in those provisions to be satisfied and shall take no action against aircraft operators in respect of emissions released until 31 December 2035 from flights between an aerodrome located in an outermost region of a Member State and an aerodrome located in the same Member State, including another aerodrome located in the same outermost region or in another outermost region of the same Member State.';

(4) Article 3ga is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. In respect of ships transporting for commercial purposes cargo or passengers, the allocation of allowances and the application of surrender requirements in respect of maritime transport activities shall apply in respect of fifty percent (50 %) of the emissions from ships performing voyages departing from a port of call under the jurisdiction of a Member State and arriving at a port of call outside the jurisdiction of a Member State, fifty percent (50 %) of the emissions from ships performing voyages departing from a port of call outside the jurisdiction of a Member State and arriving at a port of call under the jurisdiction of a Member State, one hundred percent (100 %) of emissions from ships performing voyages departing from a port of call under the jurisdiction of a Member State and arriving at a port of call under the jurisdiction of a Member State, and one hundred percent (100 %) of emissions from ships within a port of call under the jurisdiction of a Member State.

In respect of ships performing or supporting offshore operations in connection with an offshore worksite, the allocation of allowances and the application of surrender requirements shall apply in respect of the following:

(i) half of the emissions from that ship released during voyages between a port of call under the jurisdiction of a Member State and a port of call outside the jurisdiction of a Member State for the purpose of performing or supporting offshore operations in connection with an offshore worksite situated in the territorial sea, the EEZ, the continental shelf or the continental shelf sea of a Member State;

(ii) all emissions from that ship released during voyages for the purpose of performing or supporting offshore operations in connection with an offshore worksite situated in the territorial sea, the EEZ, the continental shelf or the continental shelf sea of a Member State that depart from a port of call under the jurisdiction of a Member State and arrive at a port of call under the jurisdiction of a Member State;

(iii) all emissions from that ship within a port of call under the jurisdiction of a Member State, if these emissions are closely related to performing or supporting offshore operations in connection with an offshore worksite situated in the territorial sea, the EEZ, the continental shelf or the continental shelf sea of a Member State.

However, the allocation of allowances and the application of surrender requirements shall not apply in respect of emissions released during voyages for the purpose of performing or supporting offshore operations in connection with an offshore worksite situated outside the territorial sea, the EEZ, the continental shelf or the continental shelf sea of a Member State, and in respect of emissions released within a port of call under the jurisdiction of a Member State, if these emissions are closely related to performing or supporting offshore operations in connection with an offshore worksite situated outside the territorial sea, the EEZ, the continental shelf or the continental shelf sea of a Member State.';

(b) paragraph 2 is replaced by the following:

'2. The Commission shall by means of implementing acts establish a list of neighbouring container transhipment ports and update that list, where necessary, by 31 December every year.

Those implementing acts shall list a port as a neighbouring container transhipment port either where that port is located outside the Union but less than 150 nautical miles from a port under the jurisdiction of a Member State, where the draught and berth length of that port exceed 11 meters and 250 meters, respectively, and where there are available ship-to-shore cranes suitable for container transhipment operations, or where the share of transhipment of containers, measured in twenty-foot equivalent units, exceeds 50 % of the total container traffic of that port during the most recent twelve-month period for which relevant data are available and where that port is located outside the Union but less than 300 nautical miles from a port under the jurisdiction of a Member State. For the purposes of this paragraph, containers shall be considered to be transhipped when they are unloaded from a ship to the port for the sole purpose of being loaded onto another ship. The list established by the Commission pursuant to the first subparagraph shall not include ports located in a third country for which that third country effectively applies measures equivalent to this Directive. This includes ports in third countries with whom an ETS linking agreement is in place.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).';

(c) paragraph 3 is amended as follows:

(i) the date "31 December 2030" is replaced by "31 December 2038".

(ii) the penultimate sentence is replaced by the following:

'The revenue generated from the auctioning of that share of allowances shall be used for the priority purposes referred to in the first subparagraph of Article

10(3), points (a) and (d), and for purpose (g) of the purposes referred to in the second subparagraph of Article 10(3).’

(d) the following new paragraph is added:

‘4. In the period until 2040, the Commission shall use up to a maximum of 0.5 million allowances from the Union-wide quantity of allowances referred to in Article 9 to cover the financing of the implementation of the system in relation to maritime transport activities.

These allowances shall be auctioned in accordance with Article 10(4) of this Directive, with proceeds constituting external assigned revenue under Article 21(5) of Regulation (EU, Euratom) 2024/2509.’;

(5) the following Article 3gaa is inserted:

‘Article 3gaa

Reservation and allocation of allowances for the use of sustainable maritime fuels and zero-emission propulsion technologies

1. Notwithstanding Article 10(1), for the period from 1 January [2028/first year after the entry into force of this Directive] to 31 December 2040, a maximum of 110 million of the Union-wide quantity of allowances referred to in Article 9 shall be reserved for the use of sustainable maritime fuels or the deployment and operation of zero-emission propulsion technologies, including electric and wind-assisted propulsion systems, provided that those fuels and technologies are used in accordance with the rules laid down in this Article.

2. For the purposes of this Article, ‘sustainable maritime fuels’ means:

(a) biogas and advanced biofuels as defined in Article 2, second paragraph, points (28) and (34), respectively, of Directive (EU) 2018/2001, for which the emission factor is zero under Annex IV of this Directive or under the implementing act adopted pursuant to Article 14 of this Directive;

(b) renewable fuels of non-biological origin compliant with Article 25 of Directive (EU) 2018/2001, for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive;

(c) low-carbon hydrogen and low-carbon fuels as defined respectively in Article 2, point (11) and (13) of Directive (EU) 2024/1788 for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive..

3. The allowances referred to in paragraph 1 of this Article shall be reserved, on a transparent, equal-treatment and non-discriminatory basis, in respect of shipping companies for the use of sustainable maritime fuels and zero-emission propulsion technologies on voyages for which allowances have to be surrendered in accordance with Article 12(3).

Allowances may support the use of sustainable maritime fuels or zero-emission propulsion technologies by vessels below 5 000 gross tonnage but not below 400 gross tonnage on voyages from their last port of call to a port of call under the jurisdiction of a Member State and from a port of call under the jurisdiction of a Member State to their next port of call, as well as within ports of call under the jurisdiction of a Member State.

4. Member States shall allocate the allowances reserved under paragraph 1 of this Article to cover all or part of:

(a) the remaining price differential between the use of sustainable maritime fuels and the use of maritime fossil fuels;

(d) the cost incurred in deploying and operating zero-emission propulsion technologies compared to conventional propulsion systems, in proportion to the amount of emission reductions achieved through the use of these zero-emission propulsion technologies.

5. The Commission shall determine the price differential between the use of maritime fossil fuels and sustainable maritime fuels on the basis of objective and verifiable information, including, where available, actual transaction prices. Where no representative market price exists for sustainable maritime fuels, the Commission shall establish reference prices on the basis of objective and verifiable elements. For maritime fossil fuels, the Commission shall estimate a weighted average price reflecting the actual mix of maritime fossil fuels reported under Regulation (EU) 2015/757.

The cost incurred in deploying and operating zero-emission propulsion technologies compared to conventional propulsion systems shall be calculated by shipping companies on the basis of average emissions reduction costs to be determined by the Commission, taking into account objective and verifiable information.

6. When allocating allowances in accordance with this Article, Member States shall ensure that the following origin requirements are fulfilled:

(a) the batches of sustainable maritime fuels shall be produced in the Union, or in a third country that has an emissions trading system linked with the emissions trading system established in accordance with this Directive, or in a third country to which the Union provides support pursuant to Article 25b for the effective application of greenhouse gas emission pricing with an absolute emissions cap;

(b) the zero-emission propulsion technologies shall be manufactured in the Union, or in a third country that has an emissions trading system linked with the emissions trading system established in accordance with this Directive, or in a third country to which the Union provides support pursuant to Article 25b for the effective application of greenhouse gas emission pricing with an absolute emissions cap.

7. By way of derogation from paragraph 6, Member States shall not apply origin requirements in respect of sustainable maritime fuels used on eligible voyages between a port of call under the jurisdiction of a Member State and a port outside the jurisdiction of a Member State that is identified in the implementing act adopted pursuant to paragraph 8, first subparagraph.

8. The Commission is empowered to adopt implementing acts listing ports outside the jurisdiction of a Member State that align with the guiding principles for support to port projects in third countries identified in the EU Ports strategy* and that participate in green shipping corridors with other ports under the jurisdiction of a Member State. The Commission is also empowered to adopt implementing acts to update that list, as appropriate. Such implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

9. The allowances allocated in relation to the use of sustainable maritime fuels and zero-emission propulsion technologies shall cover:

(a) 55 % of the remaining price differential between the use of maritime fossil fuels, on the one hand, and biogas and advanced biofuels as defined in Article 2 points (28) and (34), of Directive (EU) 2018/2001, for which the emission factor is zero under Annex IV to this Directive or under the implementing act adopted pursuant to Article 14 of this Directive;

(b) 90 % of the remaining price differential between the use of maritime fossil fuels and renewable fuels of non-biological origin compliant with Article 25 of Directive (EU) 2018/2001 for which the emission factor is zero under Annex IV to this Directive or under the implementing act adopted pursuant to Article 14 of this Directive;

(c) 80 % of the remaining price differential between the use of maritime fossil fuels and low-carbon hydrogen and low-carbon fuels as defined respectively in Article 2, point (11) and (13) of Directive (EU) 2024/1788 for which the emission factor is zero under Annex IV or under the implementing act adopted pursuant to Article 14 of this Directive.;

(d) 90 % of the additional cost incurred in deploying and operating zero-emission propulsion technologies compared to conventional propulsion systems.

Where sustainable maritime fuels or zero-emission propulsion technologies are used on a voyage between a port under the jurisdiction of a Member State and a port under the jurisdiction of a Member State located on an island, for which allowances have to be surrendered in accordance with Article 12(3), the percentages laid down the first subparagraph, points (a) to (d), shall be increased by 5 percentage points.

Where allowances are to be allocated in relation to sustainable maritime fuels produced using feedstock that is sourced in the Union, or in a third country that has an emissions trading system linked with the emissions trading system established in accordance with this Directive, or in a third country to which the Union provides support pursuant to Article 25b for the effective application of greenhouse gas emission pricing with an absolute emissions cap, the percentages laid down in the first subparagraph, points (a) to (c), shall be increased by 10 percentage points.

Where allowances are to be allocated in relation to the deployment and operation of zero-emission propulsion technologies that have been fitted on ships in Union shipyards, the percentage laid down in the first subparagraph, point (d), shall be increased by 5 percentage points.

Where sustainable maritime fuels are used or zero-emission propulsion technologies are deployed or operated on a voyage between a port of call under the jurisdiction of a Member State and a port of call outside the jurisdiction of a Member State, the amount of allowances to be allocated in accordance with this Article shall be multiplied by 50 %, in accordance with the geographical scope referred to in Article 3ga of this Directive.

10. On a yearly basis, shipping companies may apply for an allocation of allowances based on the quantity of sustainable maritime fuels used and the emission reductions achieved through zero-emission propulsion technologies during the preceding calendar year.

11. If, for a given year, the demand for allowances exceeds the quantity of allowances available, the quantity of allowances shall be reduced in a uniform manner for all shipping companies concerned by the allocation for that year.

12. The allocation of allowances under this Article may take into account possible support from other schemes at national, Union, or international level.

13. The Commission shall publish in the Official Journal of the European Union the following information:

(a) the average price differential between maritime fossil fuels and sustainable maritime fuels on a yearly basis for the previous year;

(b) average emissions reduction costs resulting from the deployment and operation of zero-emission propulsion technologies every three years for the previous three years.

14. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive by establishing detailed rules concerning:

(a) the calculation of price differentials, including the establishment of reference prices where representative market prices are not available;

(b) the determination of objective criteria applicable to eligible zero-emission propulsion technologies when contributing to greenhouse gas emission reductions;

(c) the determination of the emissions reductions coming from the deployment and operation of zero-emission propulsion technologies;

(d) application, allocation, monitoring, reporting and verification procedures as regards the allocation of allowances in accordance with this Article;

(e) safeguards to prevent overcompensation, including in relation to national, Union, or international schemes;

(f) establishing safeguards and procedures to ensure a fair and proportionate distribution of allowances among shipping companies, while taking into account the need to preserve effective competition and access for small and medium sized shipping companies.

15. Member States shall ensure the visibility of funding under this Article in a manner corresponding to the requirements set out in Article 30m(1), points (a) and (b).

16. From 1 January 2032, the Commission shall evaluate the application of this Article in the annual report it is required to submit pursuant to Article 10(5).

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* Communication from the Commission from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'EU Ports Strategy' COM(2026) 112 final, Annex 1, 'B)Guiding principles for support to port projects in third countries.';

(6) after Article 3gaa, the following Article 3gab is inserted:

'Article 3gab

Reservation and allocation of allowances for the decarbonisation of the maritime sector in certain least developed countries and small island developing States

An amount of 0.9 million of the Union-wide quantity of allowances referred to in Article 9 shall be reserved for the decarbonisation of the maritime sector in least developed countries and small island developing States as defined by the United Nations, excluding those States whose GDP per capita equals or exceeds the Union average. Such amount shall be reserved on an annual basis until 2035.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive by laying down rules on the use of the reserved allowances referred to in the first subparagraph of this paragraph and the procedure to make available those allowances.';

(7) Article 3gg is amended as follows:

(a) in paragraph 1, point (c) is replaced by the following:

'(c) any issue related to the coherence between the EU ETS and that measure, including double payment.'

(b) in paragraph 1, the second subparagraph is replaced by the following:

'Where appropriate, the Commission may accompany the report referred to in the second subparagraph of this paragraph with a legislative proposal to amend this Directive in a manner that is consistent with the Union ~~2030~~ climate targets and the climate-neutrality objective set out in Regulation (EU) 2021/1119, and with the aim of preserving the environmental integrity and effectiveness of Union climate action, in order to ensure coherence between the implementation of the global market-based measure and the EU ETS, while avoiding double payment and any significant double burden.';

(c) paragraph 4 is replaced by the following:

'No later than 30 September 2035, the Commission shall assess the implementation of Article 3ga(3), second subparagraph, including its contribution to the decarbonisation of maritime transport and the administrative costs incurred by the Member States concerned, and the appropriateness of extending its application beyond 31 December 2038 and, if appropriate, submit a legislative proposal to that effect'.

(d) in paragraph 5, the first subparagraph is replaced by the following:

'No later than 31 December 2031 the Commission shall present a report to the European Parliament and to the Council in which it shall examine the feasibility and economic, environmental and social impacts of the inclusion in this Directive of emissions from ships, below 5 000 gross tonnage but not below 400 gross tonnage, which are referred to in Article 2(1d) points (e) and (f) of Regulation (EU) 2015/757';

(e) the following paragraph 6 is added:

'6. By 1 January 2032, the Commission shall carry out an evaluation of the application of Article 3gaa and submit a report to the European Parliament and to the Council.';

(f) in Article 3gg, the following paragraph is added:

7. No later than 30 September 2033, the Commission shall assess the implementation of the derogation provided for in Article 12(3-e), taking into account technological developments, the availability and deployment of low- and zero-emission propulsion technologies and sustainable fuels suitable for ice-class ships, the impact of the derogation on the decarbonisation of maritime transport, and the appropriateness of extending its application beyond 31 December 2035 and, where appropriate, submit a legislative proposal to that effect.

(8) in Article 4, ‘Article 27’ is replaced by ‘Articles 27 and 27a’.

(9) in Article 6, the following paragraphs are added:

‘3. The Commission is empowered to adopt implementing acts establishing rules for the granting, suspension and withdrawing of greenhouse gas emissions permit by the competent authority. Such implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

4. Where during the period referred to in Article 3, point (h), the competent authority successively grants for the first time a greenhouse gas emissions permit, withdraw that permit and then grant a new one, the installation shall only be reintroduced in the EU ETS in the following five-year period for free allocation referred to in Article 11(1), under the relevant status as incumbent installation or new entrant, as applicable. That installation shall remain outside the scope of the EU ETS for the rest of the five-year period for free allocation referred to in Article 11(1) during which the permit was successively granted for the first time and withdrawn.’;

(10) in the title of Chapter III the word ‘stationary’ is deleted;

(11) the following Article is inserted:

‘Article 6a

Competent authority in respect of CO_2 transport infrastructure

1. The competent authority in respect of CO_2 transport infrastructure shall be the competent authority of the Member State where the CO_2 that is being transported is captured. Where CO_2 is captured outside the EEA, the competent authority shall be the competent authority of the first Member State of transit of the CO_2.

2. The competent authorities pursuant to paragraph 1 and the competent authorities of transit or reception Member States shall exchange all relevant information necessary for the approval of monitoring plans and verification of emission reports of the CO_2 transport infrastructures.’

(12) Article 9 is amended as follows:

(a) the fourth subparagraph is replaced by the following:

‘From 1 January 2026 and 1 January 2027 respectively, the quantity of allowances shall be increased to take into account the coverage of greenhouse gas emissions other than CO2 emissions from maritime transport activities and the coverage of emissions of offshore ships, based on their emissions for the most recent year for which data are available. Notwithstanding Article 10(1), the allowances resulting from that increase shall be made available to support innovation in accordance with Article 3gaa from 2030.’

(b) in Article 9, the following paragraphs are added:

‘In [2031/two years after inclusion of additional small ships in MRV], the Union-wide quantity of allowances shall be increased to take into account the coverage of emissions of the categories of ships below 5 000 gross tonnage but not below 400 gross tonnage referred to in Annex I, based on their emissions for the most recent year for which data are available. The allowances resulting from that increase shall contribute to the quantity referred to in Article 3gaa.

The Union-wide quantity of allowances shall be increased in respect of municipal waste incineration by the following amounts, in consideration of the phase-in requirements established in Article 12a:

– 10.2 million allowances in 2031;

– 19.5 million allowances in 2032;

– 28.1 million allowances in 2033; and

– 36 million allowances in 2034, subject thereafter to the application of the linear reduction factor.

The linear factor shall be 3.7% from 2031 to 2035 and 1.7% from 2036.

The Commission shall publish the Union-wide quantity of allowances by September 2028.';

(13) the following Articles are inserted:

'Article 9b

Funding for international credits

1. Up to 260 million allowances from the Union-wide quantity of allowances referred to in Article 9 shall be made available to the facility for the purchase of up to 260 Mt of high quality and high integrity international credits, out of the international credits provided in Regulation 2021/1119/EU, to contribute to the climate ambition of the activities listed in Annex I from 2036 to 2040. All purchases shall be subject to the criteria of Regulation 2021/1119/EU being fulfilled.

2. Proceeds from the auctioning of allowances under paragraph 1 shall constitute external assigned revenue in accordance with Article 21(5) of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council. The Commission shall ensure that the auctioning of allowances for the facility is in accordance with the principles and modalities referred to in Article 10(4), in due time for the start of the purchases.

3. By 31 January 2033, the Commission shall present to the European Parliament and to the Council a report assessing the development of a high-quality and high-integrity international credits market, taking into account all the criteria set out in Regulation 2021/1119/EU, and their availability to contribute to the climate ambition of the activities listed in Annex I, including the following:

(a) the environmental integrity, accounting robustness and verification requirements that would need to be fulfilled for any such credits to contribute to the ambition of these sectors, taking into account developments under the Paris Agreement and EU legislation;

(b) the development of the market for international credits, in terms of supply and demand;

(c) the potential implications of such use for the functioning and integrity of the EU ETS;

(d) the specific implications for sectors covered by the EU ETS, including the risk of carbon leakage, the impacts on competitiveness, the risk of mitigation deterrence, and the consistency with the Union's economy-wide climate neutrality objective.

4. Subject to the report in paragraph 3, by way of derogation from Article 9, in the event that high-quality and high-integrity, cost-effective international credits referred to in paragraph 1, are not available, the linear factor shall revert to 2.7% from 2036.

5. Allowances set aside under paragraph 1 shall be allocated to the Industrial Decarbonisation Bank for industrial decarbonisation projects in accordance with Article 10ce in the event they are not allocated for the purposes established in paragraph 1.

Article 9c

Domestic permanent carbon removals

1. The Union-wide quantity of allowances referred to in Article 9 shall be increased by 250 million allowances. Those allowances shall be made available to the Commission to auction them from 2031 to 2040 to generate revenues for the purchase of an equivalent amount of domestic permanent carbon removal units generated by BioCCS and DACCS activities under Regulation (EU) 2024/3012 of the European Parliament and of the Council. The Commission shall purchase those removals units prioritising a portfolio of cost-effective, high-integrity projects with payment upon delivery of the certified units.

2. An additional 10 million allowances from the Union-wide quantity of allowances referred to in Article 9 between 2031 and 2040 shall be made available to the Commission to auction them to generate revenues for the purchase of those permanent carbon removals units, in the event the revenues generated from the allowances under paragraph 1 would be insufficient for the purchase of the total amount of domestic permanent carbon removals units.

3. Proceeds from the auctioning of allowances under paragraphs 1 and 2 of this Article shall constitute external assigned revenue in accordance with Article 21(5) of Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council*. The auctioning of allowances for the purchase of domestic permanent carbon removal units referred to in paragraph 1 of this Article shall be carried out in accordance with the principles and modalities referred to in Article 10(4) of this Directive. The allowances set aside under paragraphs 1 and 2 of this Article shall be returned to the Union-wide quantity of allowances referred to in Article 9 of this Directive in the event they are not auctioned for the purposes in paragraph 1 of this Article before 2041.

4. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the detailed modalities for the purchase of the domestic permanent carbon removal units indicated under paragraph 1, including the timing of the auctioning of the allowances referred to in paragraphs 1 and 2; the forms of support, selection procedure and criteria, eligibility criteria and technological requirements for the different types of support and payment mechanisms, using competitive allocation where feasible and reporting transparently on the outcome of the procedures; as well as the financial rules to ensure an appropriate implementation of the purchase. Those delegated acts shall ensure that any early auctioning of the allowances referred to in paragraphs 1 and 2 is balanced out through the auctioning of the allowances under Article 10, to achieve the equivalent effect of a gradual integration of carbon removals towards the auctioning of 48 million of the allowances referred to in paragraphs 1 and 2 in 2040. Those delegated acts shall provide detailed modalities for the purchase of the domestic permanent carbon removals prioritising a portfolio of cost-effective, high-integrity projects with payment upon delivery of the certified units and aiming to limit fiscal exposure.

5. The quantity of domestic permanent carbon removals to be purchased shall be reduced by the amount of BioCCS domestic carbon removals that operators, aircraft operators and shipping companies use in accordance with Article 14(1a), and a corresponding amount of allowances shall be cancelled from the 250 million allowances referred to in paragraph 1.

6. Any permanent carbon removal certified units generated by BioCCS and DACCS activities under Regulation (EU) 2024/3012 and purchased by the Commission in accordance with this Article shall be cancelled and no longer be allowed to account as negative emissions under Article 14(1a) of this Directive.

7. The linear reduction factor established in Article 9 shall not apply to the increase of allowances established in paragraph 1.

8. Before 31 December 2034, the Commission shall present a report to the European Parliament and to the Council in which it assesses the progress regarding the purchase of domestic permanent carbon removal units provided for under paragraph 1, considering the available supply, and the price of domestic permanent carbon removal units in comparison with the assigned budget. The report shall also examine the possible contribution of nature based removals and carbon farming sequestration units certified under Regulation (EU) 2024/3012 of the European Parliament and of the Council to permanent carbon removals, and assess the feasibility to gradually transition, from an integration managed by the Commission, towards a direct integration by operators, beyond own use, of domestic permanent carbon removal units in the EU ETS.

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* Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council of 23 September 2024 on the financial rules applicable to the general budget of the Union (OJ L, 2024/2509, 26.9.2024, ELI: http://data.europa.eu/eli/reg/2024/2509/oj).';

(14) Article 10 is amended as follows:

(a) in paragraph 1, the first and second subparagraphs are replaced by the following:

'1. At least 57 % of the allowances available the Union-wide quantity of allowances referred to in Article 9 of this Directive that are not allocated in accordance with Articles 9, 3gaa, 3gab, 9c, 10cc and 19 of this Directive, shall be auctioned by the Member States, without prejudice to a possible reduction pursuant to Article 10a(5a) of this Directive, to the placing of allowances in the market stability reserve (MSR) established by Decision (EU) 2015/1814* of the European Parliament and of the Council or to the cancellation of allowances in accordance with Article 12(4) of this Directive. The share of allowances to be auctioned by the Member States shall increase as a result of the application of the CBAM factor in accordance with Article 10a(1a) of this Directive. The quantity of allowances to be auctioned by the Member States shall be distributed in accordance with paragraph 2 of this Article.;

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* Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, pp. 1).'

(b) in paragraph 2, the following sentence is added to point (b):

‘Spain, Cyprus, Malta and Slovenia shall use their additional allowances for the priority purposes listed in Article 10(3) first subparagraph.’;

(c) paragraph 3 is replaced by the following:

‘3. Member States shall determine the use of revenues generated from the auctioning of allowances referred to in paragraph 2 of this Article, except for the revenues established as own resources in accordance with Article 311, third paragraph, TFEU and entered in the Union budget. Member States shall use at least 50% of those revenues, with the exception of the revenues used for the compensation of indirect carbon costs referred to in Article 10a(6) of this Directive, or the equivalent in financial value of those revenues, to support the decarbonisation of ETS sectors, for one or more of the following priority purposes:

(a) to top-up the support mechanisms in this Directive for reducing climate impacts from ETS sectors;

(b) to develop clean energies, electricity storage and grids for electricity transmission and distribution particularly around industrial clusters in view of the increased electricity demand from industrial decarbonisation projects, as well as to meet the commitments on renewable energies, on energy efficiency and inter-connection set out in National Energy and Climate Plans;

(c) to finance investments in industrial decarbonisation and enabling measures for such decarbonisation, including investments in industrial electrification, clean industrial production technologies, the capture, use and storage of CO_2 and the development of the CO_2 transport network;

(d) measures to decarbonise the maritime sector, including the improvement of the energy efficiency of ships, ports, innovative technologies and infrastructure, electrification and sustainable alternative fuels, such as hydrogen and ammonia that are produced from renewables, and zero-emission propulsion technologies;

(e) measures to invest in innovative technologies to decarbonise aviation, including support to electrification, actions to reduce the overall climate impacts of aviation and increase production of low-and zero-carbon fuels, and measures to support the decarbonisation of airports;

(f) measures to support modal shift towards decarbonised forms of transport;

(g) to support competent authorities involved in the collection and disposal of municipal waste in the implementation of measures in line with the higher steps of the waste hierarchy as defined in Article 4 of the Directive 2008/98/EC, namely waste prevention, preparing for reuse, separate collection, sorting and recycling;

(h) circularity measures to reduce emissions from ETS sectors;

(i) to support the development of lead markets for low-carbon and circular products such as bio-based fertilisers, bio-based chemicals or green steel;

(j) to finance research and development necessary for any of the purposes in points (a) to (h).’;

Notwithstanding the previous subparagraph, Member States may use the remainder of those revenues for which they determine the use for the following purposes:

(a) permanent carbon removal methods, such as direct air capture and storage;

(b) measures to avoid deforestation and support the protection and restoration of peatland, forests and other land-based ecosystems or marine-based ecosystems, including measures that contribute to the protection, restoration and better management thereof, in particular as regards marine-protected areas, and increase biodiversity-friendly afforestation and reforestation, including in developing countries that have ratified the Paris Agreement;

(c) forestry and soil sequestration;

(d) investments to reduce agricultural emissions linked to more efficient use of fertilisers in the Union or to greenhouse gases other than CO2, and to support end-users in the uptake of bio-based, organic and circular fertilisers, in line with the Fertilizer Action Plan;

(e) measures intended to reduce emissions in buildings, by improving energy efficiency, district heating systems and insulation, to support efficient and renewable heating and cooling systems, or to support the deep and staged deep renovation of buildings in accordance with Directive 2024/1275 of the European Parliament and of the Council*, starting with the renovation of the worst-performing buildings;

(f) to provide financial support to address social aspects related to climate change in lower- and middle-income households;

(g) to cover administrative expenses of the management of the EU ETS;

(h) to adapt to the impacts of climate change;

(i) to finance climate actions in vulnerable third countries, including the adaptation to the impacts of climate change and measures to transfer technologies;

(j) to promote skill formation and reallocation of labour in order to contribute to a just transition to a climate-neutral economy, in particular in regions most affected by the transition of jobs, in close coordination with the social partners, and to invest in upskilling and reskilling of workers potentially affected by the transition, including workers in maritime transport;

(k) to address any residual risk of carbon leakage in the sectors covered by Annex I to Regulation (EU) 2023/956 of the European Parliament and of the Council**, supporting the transition and promoting their decarbonisation in accordance with State aid rules.

The use of revenues under the previous subparagraphs shall not prolong reliance on fossil fuels in power generation and shall be consistent with the transition to a safe and sustainable low-carbon economy, the objectives of the Union's 2040 climate and energy policy framework, and the climate-neutrality objective set out in Regulation (EU) 2021/1119.

Member States shall inform the Commission as to the use of revenues and the actions taken pursuant to paragraphs 3 of this Article in their reports submitted under Article 19(2) of Regulation (EU) 2018/1999 of the European Parliament and of the Council***, specifying, where relevant and as appropriate, which revenues are used and the actions that are taken to implement their integrated national energy and climate plans submitted in accordance with that Regulation, and their territorial just transition plans prepared in accordance with Article 11 of Regulation (EU) 2021/1056 of the European Parliament and of the Council****. Member States shall disburse their revenues by the third year after the year of generation.

The reporting shall be sufficiently detailed to enable the Commission to assess the Member States' compliance with paragraphs 3 of this Article, and Article 30m.;

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* Directive 2024/1275 of the European Parliament and of the Council of 24 April 2024 on the energy performance of buildings (recast) (OJ L 1275 8.5.2024, p. 1).

** Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism (OJ L 130, 16.5.2023, p. 52).

*** Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1)

**** Regulation (EU) 2021/1056 of the European Parliament and of the Council of 24 June 2021 establishing the Just Transition Fund (OJ L 231, 30.6.2021, p. 1).'

(a) paragraph 5 is replaced by the following:

'5. The Commission shall monitor the functioning of the European carbon market. Each year, it shall submit a report to the European Parliament and to the Council on the functioning of the carbon market, including the operation of the auctions, liquidity and the volumes traded, and summarising the information provided by the European Securities and Markets Authority (ESMA) in accordance with paragraph 6 and the information provided by Member States on the financial measures referred to in Article 10a(6). Member States shall submit any relevant information and report yearly by 30 June on the basis of a questionnaire or outline adopted by the Commission in the form of implementing acts pursuant to Article 21(1). The Commission shall publish the report on the functioning of the European carbon market within six months of receiving the relevant information and reports from the Member States.';

(b) the following paragraph is added:

‘7. Where a Member State decides to top up ETS mechanisms that use allowances, the Member State may maintain this approach by refraining from auctioning so as to give its support in the same manner.’;

(15) Article 10a is amended as follows:

(a) in paragraph 1, the first subparagraph is replaced by the following:

‘1. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the Union-wide and fully harmonised rules for the allocation of allowances referred to in paragraphs 3b to 3d, 5, 7 and 19 of this Article.’;

(b) paragraph 1a is amended as follows:

(i) the second subparagraph is replaced by the following:

‘By way of derogation from the first subparagraph of this paragraph, for the first years of application of Regulation (EU) 2023/956, the production of goods listed in Annex I to that Regulation shall benefit from free allocation, in accordance with paragraphs 3a to 3d, in reduced amounts. A factor reducing the free allocation for the production of those goods shall be applied (CBAM factor). The CBAM factor shall be equal to 100 % for the period between the entry into force of that Regulation and the end of 2025 and, subject to the application of provisions referred to in Article 36(2), point (b), of that Regulation, shall be equal to 97,5 % in 2026, 95 % in 2027, 91.5 % in 2028, 81 % in 2029, 59% in 2030, 48% in 2031, 37,5% in 2032 and 27% in 2033, 15% from 2034 to 2037. From 2038, a CBAM factor of 0 % shall apply.’;

(ii) the following subparagraph is added after the second subparagraph:

‘Notwithstanding the second subparagraph, when additional goods are added to the list in Annex I to Regulation (EU) 2023/956 whose production benefits from free allocation, for these additional goods the CBAM factor shall be equal to 97,9 % in the first year and 95,8 % in the second year of the next five-year period referred to in Article 11 of this Directive following their inclusion in that Annex and shall decrease with the same CBAM factor set out in the second subparagraph in each subsequent year starting with the CBAM factor of the year 2028. The CBAM factor shall be equal to 100 % in the period between the start of their inclusion in the Annex and the first year of the next five-year period referred to in Article 11 of this Directive.’;

(iii) the fourth subparagraph is replaced by the following:

‘With the exception of the allowances reserved for Articles 10cb and 10ce pursuant to Article 10cc, and of allowances set aside for new entrants pursuant to paragraph 7, first subparagraph, of this Article, allowances resulting from the reduction of free allocation shall be auctioned in accordance with Article 10(1).’

(c) in paragraph 2 is amended as follows:

(i) the following subparagraph is inserted after the second subparagraph:

‘The Commission shall supplement this Directive by providing, in the delegated acts adopted pursuant to paragraph 1, first subparagraph, sector-specific definitions of sector-specific heat and fuel benchmarks, together with the corresponding system boundaries, and the starting point values for determining the annual reduction rate for the update of the benchmark values in the implementing acts referred to in the third subparagraph.';

(ii) in the third subparagraph, the following points are added after point (e):

'(f) For the period from 2031 to 2035, the benchmark values shall be determined in the same manner as set out in points (a) and (g) of this subparagraph, on the basis of information submitted pursuant to Article 11 for the years 2026 and 2027, and on the basis of applying the annual reduction rate in respect of each year between 2008 and 2033. Information submitted by a third country for installations in its territory in accordance with an agreement concluded pursuant to Article 25 may also be taken into account.

(g) Where the annual reduction rate exceeds 2 % or is below 0,3 %, the benchmark values for the period from 2031 to 2035 shall be the benchmark values applicable in the period from 2013 to 2020 reduced by whichever of those two percentage rates is relevant, in respect of each year between 2008 and 2033.

(h) For the period from 2036 to 2040, the benchmark values shall be determined in the same manner as set out in points (a) and (g) of this subparagraph, on the basis of information submitted pursuant to Article 11 for the years 2031 and 2032 and on the basis of applying the annual reduction rate in respect of each year between 2008 and 2038. Information submitted by a third country for installations in its territory in accordance with an agreement concluded pursuant to Article 25 may also be taken into account.

(i) Where the annual reduction rate exceeds 2% or is below 0,3%, the benchmark values for the period from 2036 to 2040 shall be the benchmark values applicable in the period from 2013 to 2020 reduced by whichever of those two percentage rates is relevant, in respect of each year between 2008 and 2038.';

(d) the following paragraphs are inserted after paragraph 2:

'3a. Starting in 2031, the third to sixth subparagraphs of paragraph 1 of this Article and the second to fifth subparagraphs of Article 10b(4) shall not apply.

3b. Operators of installations carrying out activities listed in Annex I shall establish, make publicly available and submit a plan to invest in decarbonisation in the EU ('Invest in EU decarbonisation plan') for the installations for which they apply for free allocation.

Operators of incumbent installations shall submit the Invest in EU decarbonisation plan to the competent authority together with information submitted by 30 September 2029 and every five years thereafter pursuant to Article 11(1), second subparagraph. Operators of new entrants shall submit the Invest in EU decarbonisation plan to the competent authority together with their application for free allocation in accordance with the procedures established in delegated acts adopted pursuant to the first subparagraph of paragraph 1 of this Article.

By way of derogation from the second subparagraph of this paragraph, the Invest in EU decarbonisation plan may be submitted at a later date, together with activity-level change reports submitted in accordance with the implementing acts adopted pursuant to paragraph 21.

The plan referred to in the first subparagraph of this Article shall be consistent with the climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119 and shall include all the following elements:

(a) measures and investments in line with climate neutrality by 2050 at the level of the installation, considering the role of circularity measures, excluding the use of carbon offset credits (‘decarbonisation measures and investments’);

(b) intermediate targets to measure, by 31 December 2035 and by 31 December of each fifth year thereafter, progress made towards reaching climate neutrality through the measures and investments as set out in point (a).

For each five-year period for free allocation referred to Article 11, the decarbonisation investments referred to in point (a) shall correspond to a volume at least equivalent to the economic value of 100% of the amount of free allocation under the relevant five-year period. These decarbonisation investments shall qualify as eligible costs, be implemented in the EU and lead to significant emissions reduction at the level of the installation within the relevant five-year period for which that installation is applying for free allocation, in accordance with the list and criteria established pursuant to paragraph 3e of this Article.

3c. Upon submission of an Invest in EU decarbonisation plan that has been verified in accordance with Article 15 and approved by the competent authority, 80 % of the amount of free allocation to be received under the relevant five-year period shall be allocated annually to the installation.

Where an installation has received allowances in accordance with the first subparagraph during each five-year period starting in 2031, but has then relocated or otherwise, directly or indirectly, transferred, in whole or in part, its relevant production capacity or the associated economic activity outside the Union, the Member State shall require the operator to reimburse the received allowances for the relevant allocation period. In the absence of reimbursement, the Member State shall deduct free allowances in the following years.

The remaining 20 % of the amount of free allocation for that five-years period shall only be allocated to the installation after the confirmation, no later than two years after the end of the relevant five-year period, by the competent authority where the decarbonisation investments are implemented that the following conditions are met:

(a) the decarbonisation investments were implemented by that time and they were implemented in the EU;

(b) eligible costs corresponding to a volume at least equivalent to the economic value of 100% of the amount of free allocation under the relevant five-year period were invested;

(c) the existing annual reports referred to in Article 15 show that significant emissions reductions were achieved at the level of the installation in the relevant five-year period.

Allowances that are not allocated in accordance with the first and third subparagraphs or that are returned in accordance with the second subparagraph shall be made available for free allocation in the subsequent five-year period.

By way of derogation from the first subparagraph, where a project that was selected for the award of support under the Industrial Decarbonisation Bank and Investment Booster established under Articles 10cc, 10cd and 10ce or the Innovation Fund referred to in Article 10cb is being implemented in the installation during the five-year period under which it applies for free allocation, the operator of that installation shall be exempted from the obligation to establish a plan in accordance with paragraph 3b and shall receive 80 % of the amount of free allocation as referred to in the first subparagraph without additional verification. By way of derogation from the third subparagraph, the remaining 20 % of the amount of free allocation for the relevant five-year period shall only be allocated to that same installation, after the launch of the disbursement of support to the project under the Innovation Fund or upon the start of construction regarding projects awarded support under the Industrial Decarbonisation Bank or Investment Booster, and after where the competent authority confirms in accordance with the third subparagraph that eligible costs corresponding to a volume at least equivalent to the economic value of 100% of the amount of free allocation under the relevant five-year period were invested in the EU.

The requirements set out in paragraph 3b and in the first and third subparagraphs of this paragraph shall not apply to the 10 % most efficient installations in a sector or subsector in the Union referred to in the first subparagraph of Article 10a(2) and in respect of the years used to determine the revised benchmark values pursuant to the third subparagraph of that Article for the relevant five-year free allocation period, to zero emissions or low-carbon installations, to installations for which the operators, following a change in their production processes in accordance with Article 2(1), decide that they are is to remain within the scope of the EU ETS.

3d. Operators of installations applying for free allocation in accordance with this Article may request to form a pool of installations for the purposes of fulfilling jointly the investment requirements under paragraph 3b, fifth subparagraph.

Operators who wish to form a pool shall apply to the competent authority by submitting an agreement they concluded for the purpose of fulfilling jointly the investment requirements (‘joint decarbonisation investment agreement’) specifying the installations and the period for which they want to form the pool. The joint decarbonisation investment agreement may relate to five or more calendar years, provided that the minimum duration of each agreement fully covers the five-year period referred to in Article 11 for which the installations are applying for free allocation.

The joint decarbonisation investment agreement shall be concluded before submitting an application for free allocation and shall be submitted to the competent authority together with information submitted pursuant to the second subparagraph of Article 11(1). After the joint decarbonisation agreement has been submitted to the competent authority, other operators may only be added to that agreement under the next five-year period for free allocation referred to in Article 11.

Where a joint decarbonisation investment agreement is concluded, the decarbonisation investments referred to in the fifth subparagraph of paragraph 3b shall correspond to a volume at least equivalent to the economic value of 100% of the amount of free allocation allocated to all installations that are part of the pool under the relevant five-year period.

3e. The Commission shall supplement this Directive by providing, in close consultation with the relevant stakeholders, in the delegated act adopted pursuant to the first subparagraph of paragraph 1, complementary implementation details as regards the free allocation provisions set out in paragraphs 3b to 3d of this Article, including:

(a) a list of requirements and eligible costs to qualify as decarbonisation investments;

(b) rules concerning the qualification as significant emissions reduction;

(c) a methodology for determining whether the measures and investments listed in the Invest in EU decarbonisation plan lead to significant emissions reduction;

(d) the detailed timeline for the submission of the Invest in EU decarbonisation plans;

(e) the methodology for determining the economic value of the quantity of free allowances received;

(f) rules regarding the reimbursement of allowances under paragraph 3c, second subparagraph;

(g) the requirements for installations to qualify as zero-emissions or low carbon under paragraph 3c, sixth subparagraph;

(h) the detailed conditions that shall apply to the derogations under paragraph 3c, fifth and sixth subparagraphs;

(i) the details of the application procedure to form a pool, including the minimum content and detailed conditions for the application to form a pool pursuant to paragraph 3d (including for installations in multiple Member States) and detailed timeline for its submission to the competent authority;

(j) the liability distribution for the fulfilment of investment requirements referred to in paragprah 3b, fifth subparagraph, when operators choose to form a pool.

When determining the requirements for installations to qualify as zero emissions or low carbon, the Commission shall take into account the estimated sector specific emissions reductions that are necessary by 2040 and 2050 to be in line with the climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119, as well as the available low carbon technologies and other abatement options available for each sector, taking into account the net-zero technologies listed in Article 4 of Regulation (EU) 2024/1735.

The Commission is empowered to adopt implementing acts to specify the following:

(i) the content of the information referred to in the fourth subparagraph of paragraph 3b, points (a) and(b);

(ii) the format of the Invest in EU decarbonisation plans.

When specifying the format and content of the Invest in EU decarbonisation plans, the Commission shall seek synergies with similar plans as provided for in Union law and aim to provide for a simple format for the Invest in EU decarbonisation plans.

Such implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).';

(e) the following paragraph is added after paragraph 3e:

'3f. Where an installation received more allowances than the amount to be allocated in accordance with the rules for free allocation laid down under this Article, the competent authority shall require the installation to return such excess allowances and instruct the national administrator to transfer returning excess allowances.';

(f) paragraph 5a is replaced by the following:

'5a. By way of derogation from paragraph 5 of this Article, from the total quantity of allowances to be auctioned by the Member States pursuant to Article 10(1) between 2031 and 2040, an amount equivalent to 4 % of the Union-wide quantity of allowances referred to in Article 9, for the period 2031 and 2040, shall, to the extent necessary, be used to increase the maximum amount available under paragraph 5 of this Article.'

(g) paragraph 5b is replaced by the following:

'5b. Until the end of 2030, where less than 3 % of the total quantity of allowances is needed to increase the maximum amount available under paragraph 5 of this Article, and from 2031 to 2040 where less than 4% of the total quantity of allowances is needed to increase the maximum amount available under paragraph 5 of this Article, the following shall apply:

(a) a maximum of 50 million allowances shall be used to increase the amount of allowances available to support innovation in accordance with the Innovation Fund established pursuant to Article 10a(8) or Article 10cb;

(b) any remaining allowances shall be used in accordance with Article 10cc.';

(h) paragraph 6 is replaced by the following:

'6. Member States should adopt financial measures in accordance with the second and fourth subparagraphs of this paragraph in favour of sectors or subsectors which are exposed to a genuine risk of carbon leakage due to significant indirect costs that are actually incurred from greenhouse gas emission costs passed on in electricity prices, provided that such financial measures are in accordance with State aid rules, and in particular do not cause undue distortions of competition in the internal market. The financial measures adopted should not compensate indirect costs covered by free allocation in accordance with the benchmarks established pursuant to paragraph 1.

Member States shall also seek to use no more than 25 % of the revenues generated from the auctioning of allowances for the financial measures referred to in the first subparagraph.

Member States that have the financial measures referred to in the first subparagraph in place shall inform the Commission as to the total amount of compensation provided per benefitting sector and subsector in their reports submitted under Regulation (EU) 2018/1999, as well as information on the implementation of the measures and their contribution to decarbonisation. In addition, in any year in which a Member State uses more than 25 % of their revenues generated from the auctioning of allowances for such purposes, it shall set out the reasons for exceeding that amount and shall include relevant information on electricity prices for large industrial consumers benefiting from such financial measures, without prejudice to requirements regarding the protection of confidential information, as well as include information on whether due consideration has been given to other measures to sustainably lower indirect carbon costs in the medium to long term.

The Commission shall include in the report provided for in Article 10(5), inter alia, an assessment of the effects of such financial measures on the internal market and, where appropriate, recommend any measures that may be necessary pursuant to that assessment.

Those measures shall be such as to ensure that there is adequate protection against the risk of carbon leakage, based on *ex ante* benchmarks for the indirect emissions of CO_2 per unit of production. Those *ex ante* benchmarks shall be calculated for a given sector or subsector as the product of the electricity consumption per unit of production corresponding to the most efficient available technologies and of the CO_2 emissions of the relevant electricity production mix.';

(i) paragraph 7 is amended as follows:

(i) the first subparagraph is replaced by the following:

'Allowances from the maximum amount referred to in paragraph 5 of this Article which were not allocated for free by 2020 shall be set aside for new entrants, together with 200 million allowances placed in the market stability reserve pursuant to Article 1(3) of Decision (EU) 2015/1814 and 50 million allowances from the quantity of allowances resulting from the reduction of free allocation referred to in paragraph 1a of this Article.';

(ii) the third subparagraph is deleted;

(j) paragraphs 8 and 8a are deleted;

(16) Article 10b is amended as follows:

(a) in paragraph 1, second sentence, '2030' is replaced by '2040';

(b) in paragraph 4, the first subparagraph is replaced by the following:

'4. Other sectors and subsectors are considered to be able to pass on more of the costs of allowances in product prices, and shall be allocated allowances free of charge at 30 % of the quantity determined pursuant to Article 10a. Unless otherwise decided in the review pursuant to Article 30, free allocations to other sectors and subsectors, except district heating, shall decrease by equal amounts after 2026 so as to reach a level of no free allocation in 2030. Free allocation to district heating shall decrease by equal amounts after 2030 so as to reach a level of no free allocation in 2040.';

(17) the following articles are inserted:

'Article 10cb

Innovation Fund

1. A fund (the 'Innovation Fund') is hereby established to support bringing innovation to market, and scaling-up low-, zero-carbon and carbon negative products, processes and technologies that contribute significantly to the decarbonisation of sectors covered by this Directive.

2. The Innovation Fund shall be funded from the auctioning of 200 million allowances resulting from the reduction of free allocation in line with Article 10a(1a). To the extent that fewer than 50 million allowances remain available following the increase of the maximum amount under Article 10a(5) in accordance with Article 10a(5b), the difference shall be made available to the Innovation Fund from the quantity which could otherwise be auctioned pursuant to Article 10 in 2028.

Allowances destined for the Innovation Fund shall be auctioned in accordance with Article 10(4), with proceeds constituting external assigned revenue under Article 21(5) of Regulation (EU, Euratom) 2024/2509. The Commission shall ensure adequate resources are available for annual actions under the Innovation Fund. To this end, budgetary commitments may be broken down into annual instalments and resources be frontloaded while ensuring a balanced distribution of the fund allowances over time.

Member States may support projects that meet all selection criteria but cannot be funded from the relevant call budgets by making additional financial resources available. To this end, they shall notify the Commission of their intention to do so before the closure of the relevant call for proposals.

3. The Innovation Fund shall support projects in the territory of all Member States in sectors listed in Annex I and III, including products, technologies and processes substituting carbon-intensive ones; innovative renewable energy and energy storage technologies, including the manufacturing of clean technologies; electrification; environmentally safe carbon capture and utilisation (CCU) that contributes substantially to mitigating climate change, environmentally safe capture, transport and geological storage (CCS) of CO_2, in particular for hard-to-abate industrial emissions; direct atmospheric CO_2 capture with safe, sustainable and permanent storage (DACCS); and breakthrough innovative technologies and infrastructure, including electrification, production of low- and zero-carbon fuels, to decarbonise maritime and aviation. For the aviation and maritime sectors, the Innovation Fund may also support measures to reduce the overall climate impact, including non-CO_2 effects.

4. The Innovation Fund shall prioritise innovative technologies at a high level of technological readiness that are not yet commercially viable in line with the Union's climate and energy targets as well as circularity objectives.

5. The Commission shall implement the Innovation Fund in accordance with Regulation (EU, Euratom) 2024/2509 in direct management or in indirect management through bodies referred to in Article 62(1)(c) of that Regulation.

The Innovation Fund shall be implemented in synergy with other Union programmes. An action that has received a Union contribution from another programme may also receive another contribution under the Innovation Fund. The rules of the relevant Union programme shall apply to the corresponding contribution and, if it is based on eligible costs, the cumulative support from the Innovation Fund and that other Union programme shall not exceed the total eligible costs of the action and may be calculated on a pro-rata basis.

Support from the Innovation Fund may take any form laid down in Regulation (EU, Euratom) 2024/2509 where necessary to achieve the objective of this Directive. By way of derogation from Article 212(3) of Regulation (EU, Euratom) 2024/2509 any revenue and repayments from instruments deployed under this Article paid back to the Commission shall be used for the Innovation Fund as external assigned revenue pursuant to Article 21(5) of Regulation 2024/2509.

In accordance with Article 196(2) of Regulation (EU, Euratom) 2024/2509, financial contributions may, where necessary for the implementation of projects deemed essential for security and economic resilience, cover actions that started prior to the date of the submission of the proposal for those actions.

Where the Commission decides to disburse the Innovation Fund support through contributions to the ECF InvestEU Instrument, the Innovation Fund support shall be implemented in accordance with the rules applicable to the ECF InvestEU Instrument. However, the eligibility of the projects shall be assessed in accordance with this Article.

In the case of grants, projects shall be selected through open calls for proposals in a transparent manner. In preparing the calls for proposals, the Commission shall strive to ensure that all sectors are duly covered and that the selection process remains simple and accessible. The Commission shall take measures to ensure that the calls are communicated as widely as possible, and especially to small and medium-sized enterprises. Grant funding shall be disbursed subject to pre-determined milestones in line with project advancement.

The Commission may also select projects through competitive bidding. To deter speculative applications in calls for proposals or competitive bidding, the Commission may require applicants to provide a bid bond equivalent to a percentage share of the estimated total contract value, issued by an EU-authorised financial institution, as a guarantee of serious intent. The Commission may also require a completion bond issued by an EU-authorised financial institution equivalent to a percentage share of the total maximum requested support. The Commissions shall call a bid bond or a completion bond in the event of non-fulfilment of the obligations and commitments outlined in the grant agreement or bid. Any amount forfeited in accordance with this paragraph shall be used for the Innovation Fund as external assigned revenue pursuant to Article 21(5) of Regulation 2024/2509.

6. In implementing the Innovation Fund, the Commission shall strive to ensure effective, quality-based geographical coverage across the Union, ensure adequate participation of SME's, in particular start-ups and scale-ups, and create synergies with other funding available at EU level, in particular Horizon Europe and the European Competitiveness Fund. In this context, the Commission may provide project development assistance and, on request, technical assistance to Member States with low effective participation in the Innovation Fund to address specific project challenges in those countries and improve geographical coverage.

The Competitiveness Seal referred to in Article 8 Regulation (EU) […]/[…] of the European Parliament and of the Council* may be awarded to projects which have been assessed in an award procedure under the Innovation Fund and comply with the minimum quality requirements of that award procedure. The documents related to the award procedure may set out additional conditions.

7. Projects funded under this Article shall be required to share knowledge with other relevant projects and with Union-based researchers who have a legitimate interest.

8. The Commission shall report annually to the Climate Change Committee, the European Parliament and the Council on the implementation of the Innovation Fund, providing an analysis of funded projects by sector and Member State and an assessment of their expected contribution to Union climate neutrality under Regulation (EU) 2021/1119. Those reports shall be made public.

9. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Article with rules on the operation of the Innovation Fund, including the governance, eligibility, forms of support and related conditions, selection procedure, selection criteria, and procedural, organisational, and financial rules to ensure an appropriate implementation of the Innovation Fund in accordance with this Article.

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* [OJ reference once adopted to Regulation (EU) […]/[…] of the European Parliament and of the Council on establishing the European Competitiveness Fund ('ECF') including the specific programme for defence research and innovation activities.]

Article 10cc

Industrial Decarbonisation Bank

1. An instrument to support the scaling up and deployment of the technologies, processes and techniques to decarbonise industries (the 'Industrial Decarbonisation Bank) is established starting from 2028. It shall accelerate industrial decarbonisation, including electrification, within the Union through supporting capital investment, including grid connection, storage and flexibility costs incurred by projects, and operational expenditure for emission reductions or removals in stationary installations carrying out or substituting industrial production processes referred to in Annex I of this Directive, including in installations for the incineration of waste. In the period from 2028 to 2030, 400 million allowances from the quantity of allowances available pursuant to the second indent of Article 10a(5b) shall be reserved to support industrial decarbonisation projects on a 'first in, first served' basis in accordance with Article 10cd.

Where the allowances available pursuant to the second indent of Article 10a(5b) are less than the 400 million allowances referred to in the previous sentence, the difference shall be covered by allowances set aside pursuant to Article 10a(7).

The allowances shall be available for projects in all Member States. In the first 18 months of operation, a share of allowances shall be reserved for projects in the group of Member States with a GDP per capita at market prices below 75 % of the Union average in the period 2022 to 2024, equal to 100 million allowances. After 18 months this reserved amount shall be reduced to 60 million.

2. In 2031, any remaining allowances from the 60 million allowances reserved for projects in Member States with a GDP per capita at market prices below 75% of the Union

average in the period 2022 to 2024, shall be used in accordance with Article 10d. Any further remaining allowances shall be used in accordance with Article 10ce.

In the period from 2031 to 2040, 400 million allowances from Union-wide quantity of allowances referred to Article 9 shall be reserved to support industrial decarbonisation projects in accordance with Article 10ce. These allowances shall be auctioned in accordance with Article 10(4), with proceeds constituting external assigned revenue under Article 21(5) of Regulation (EU, Euratom) 2024/2509.

Where the amount of allowances referred to in paragraph 1 is fully used in accordance with Article 10cd, the Commission shall make available support to projects in accordance with Article 10ce earlier than 2031. The amount of allowances auctioned by Member States pursuant to Article 9 shall be reduced where necessary to enable this earlier start. Allowances corresponding to the revenues generated from that amount shall be returned to Member States starting in 2031 from the allowances reserved in accordance with the previous subparagraph.

3. Member States may support projects that meet all relevant criteria but cannot be funded from the relevant award procedure's budget under the Industrial Decarbonisation Bank pursuant to Article 10ce by making additional financial resources available. To this end, they shall notify the Commission of their intention to do so before the closure of the relevant award procedure.

4. Any revenues generated by activities under Articles 10cc and 10ce shall constitute external assigned revenue within the meaning of Article 21(5) of Regulation (EU, Euratom) 2024/2509 to the Industrial Decarbonisation Bank.

5. To ensure efficient use of Union resources, the Commission shall ensure synergies between the Industrial Decarbonisation Bank and the European Competitiveness Fund, particularly its 'Clean Transition and Industrial Decarbonisation' window. The Competitiveness Seal referred to in Article 8 of Regulation […]/[…] may be awarded to projects which have been assessed under the Industrial Decarbonisation Bank's procedures provided they comply with all quality requirements set out in the documents related to that procedure.

6. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive with rules on the operation of the Industrial Decarbonisation Bank, including procedural, organisational, and financial rules to ensure an appropriate implementation of the Industrial Decarbonisation Bank.

Article 10cd

Investment booster

1. Until 2030, in line with Article 10cc paragraph 1, the Commission shall support under the Industrial Decarbonisation Bank projects through allocating allowances based on a fixed carbon premium to eligible projects within the Union. The Commission shall publish open invitations for submissions of applications on the basis of which it will pre-select projects. The allowances shall then be allocated to pre-selected projects in a chronological order based on the date and time of submission of a completion bond until the amount referred to in Article 10cc is allocated or the Commission closes the invitation for submissions.

2. For the allocation of the allowances, including the pre-selection of projects, referred to in the first paragraph, the Commission shall publish Terms and Conditions developed in consultation with stakeholders. Those Terms and Conditions shall, in particular, set the fixed premium rate per tonne of CO_2 emissions avoided, eligibility criteria, minimum requirements

as regards emission reductions, mandatory documentation, size of the completion bond and monitoring and verification requirements. The Terms & Conditions may also provide mechanisms for sharing possible gains and for ensuring best value for money, such as a review of the fixed premium rate should there be indications that it is no longer appropriate in light of market developments and/or differentiated Terms and Conditions.

3. The completion bond referred to in paragraph 1 shall be issued by an EU-authorised financial institution equivalent to a percentage share of the total maximum requested support. It shall act as a performance guarantee, ensuring the project's timely implementation. It shall be released in two instalments, with 50% released upon start of physical construction and 50% upon start of operations.

4. Upon formal approval of the allocation under this Article, projects shall start physical construction within a maximum period of 30 months set in the relevant Terms and Conditions. Start of physical construction in the sense of this Article shall mean the start of building or assembly works on the project site, excluding preparatory works such as obtaining permits, conducting Front-End Engineering Design and other studies, or undertaking site clearance. Following the start of physical construction within the period set in the first sentence of this paragraph, the Commission shall release half of the completion bond. In the event a project has not started physical construction within the period set in the first sentence of this paragraph, the Commission shall call the completion bond in full. In addition, the support shall be revoked and all entitlements of the beneficiary of the support shall cease.

5. Following the start of operations of the project, the beneficiary of the support shall receive allowances periodically, upon independent verification of emissions avoidance, for a maximum period of 10 years. The Commission shall release the outstanding half of the completion bond. In case a project begins physical construction but fails to start operations, the Commission shall call the outstanding half of the completion bond. In addition, the support shall be revoked and all entitlements of the beneficiary of the support shall cease.

6. The allocation of allowances referred to in the previous paragraph shall correspond to the verified tonnes of CO_2 emissions avoided, multiplied by the fixed premium rate and divided by the average of the price of allowances in the auctions carried out in accordance with the delegated acts adopted pursuant to Article 10(4) of this Directive of the last 6 months preceding the allocation decision. The allocation of allowances under this paragraph may take into account possible other public support received for the project.

The Commission shall ensure appropriate accounting of the number of available allowances, before it adopts a decision on the allocation of allowances under this Article. It shall notably check that the remaining number of allowances reserved pursuant to Article 10cc is sufficient to cover the estimated demand for the allocation of allowances. Where more allowances need to be allocated to fulfil commitments taken, the Commission may take those additional allowances from the amount available pursuant to Article 10ce(1).

7. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive with rules on the operation of the Industrial Decarbonisation Bank as regards the Investment Booster, including eligibility rules, the pre-selection procedure and criteria, the allocation of allowances as well as the completion bond.

Article 10ce

Industrial Decarbonisation Bank phase two

1. From 2031, the Commission shall use the revenues from the number of allowances reserved in line with Article 10cc reserving 400 million allowances to support industrial

decarbonisation projects within the Union through competitive bidding procedures awarding Carbon Contracts for Difference (CCfD) or carbon premia without prejudice to the use of other forms of support where appropriate.

2. Prior to launching a competitive bidding procedure, the Commission shall publish Terms and Conditions developed in consultation with stakeholders to specify in particular: eligibility criteria, mandatory documentation, size of the bid bond and the completion bond as well as monitoring and verification requirements, ensuring transparency.

3. CCFDs shall support industrial decarbonisation projects by compensating for the difference between the strike price determined via the competitive bidding procedure and the prevailing carbon price on the common auction platform over a term of up to 10 years. The instrument shall operate with payments conditional on verified emission reductions in line with the relevant Terms and Conditions. The Commission may require beneficiaries to repay excess support if the carbon price surpasses the strike price by more than a pre-determined percentage, ensuring cost-efficiency. Any such repayment shall be used under the Industrial Decarbonisation Bank as external assigned revenue pursuant to Article 21(5) of Regulation (EU, Euratom) 2024/2509.

4. The Commission may require bidders under the competitive bidding procedure to submit a bid bond equivalent to a percentage share of the estimated total contract value, issued by an EU-authorised financial institution, as a guarantee of serious intent. Where a project is not selected, the bid bond shall be released immediately. The Commission shall call the bid bond in the event of non-fulfilment of the obligations and commitments outlined in the bid. Any amount forfeited in accordance with this paragraph shall be used for the Industrial Decarbonisation Bank Fund as external assigned revenue pursuant to Article 21(5) of Regulation (EU, Euratom) 2024/2509.

5. The Commission may also set in the Terms and Conditions a maximum period during which the project's physical construction shall start and may require beneficiaries to provide a completion bond issued by an EU-authorised financial institution equivalent to a percentage share of the total maximum requested support before the CCfD or carbon premium becomes legally effective. Start of physical construction in the sense of this paragraph shall mean the start of building or assembly works on the project site, excluding preparatory works such as obtaining permits, conducting Front-End Engineering Design and other studies, or undertaking site clearance. In the event a project has not started physical construction within the maximum period set in the Terms and Conditions, the Commission shall call the completion bond. In addition, the support shall be revoked and all entitlements of the beneficiary of the support shall cease.

6. In accordance with Article 196(2) of Regulation (EU, Euratom) 2024/2509, financial contributions may, where necessary for the implementation of projects deemed essential for security and economic resilience, cover actions that started prior to the date of the submission of the proposal for those actions.

7. For CCfDs or carbon premia awarded upon conclusion of a competitive bidding procedure under this Article, financial liabilities shall not exceed the proceeds of the auctioning of the total amount of allowances available to the Industrial Decarbonisation Bank. Prior to the launch of a competitive bidding procedure, the Commission shall adopt a financing decision setting out a maximum amount available for signing CCfDs or carbon premia based on an estimate of the proceeds and payment exposure, using a plausible range of carbon price scenarios. To ensure that no liabilities are created that exceed the budget of the Industrial Decarbonisation Bank, the Commission may also set in the relevant terms and conditions rules that effectively limit the financial liability arising from contracts.

8. The Commission is empowered to adopt delegated acts in accordance with Article 23 of this Directive to supplement this Directive in order to provide detailed rules on the implementation of CCfDs, including the competitive bidding procedure, the conditions for eligibility, the calculation of support, budgetary provisioning, contractual obligations, and the procedures for monitoring and verification.

9. In addition to CCfD awarded through competitive bidding, the Commission may choose to provide support under this Article in any way and form laid down in Regulation (EU, Euratom) 2024/2509, including through contributions to blending operations under the Union investment support instrument. The Commission is empowered to adopt delegated acts in accordance with Article 23 of this Directive to supplement this Directive concerning the detailed arrangements and modalities for operationalising such other forms of support.

10. Any revenue or repayment arising from instruments deployed under this Article and Article 10cd shall be used under the Industrial Decarbonisation Bank as external assigned revenue pursuant to Article 21(5) of Regulation (EU, Euratom) 2024/2509.'

(18) Article 10d is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. A fund to support investments proposed by Member States with a GDP per capita at market prices below 75 % of the Union average in the period 2022 to 2024 (the 'beneficiary Member States'), including the financing of small-scale investment projects, to modernise energy systems, improve energy efficiency, enhance industrial decarbonisation and electrification shall be established for the period from 2031 to 2040 (the 'Modernisation Fund'). The Modernisation Fund shall be financed through the auctioning of the following amounts of allowances from the total quantity of allowances to be auctioned by the Member States pursuant to Article 10(1) between 2031 and 2040:

- an amount equivalent to 2 % of the Union-wide quantity of allowances referred to in Article 9 for the period 2031 and 2040, shall be auctioned to the beneficiary Member States and used as set out in Article 10d;

- and an amount equivalent to 0,5 % of the Union-wide quantity of allowances referred to in Article 9 for the period 2031 and 2040, shall be auctioned to the benefit of the same Member States and be used to support investments on the basis of Article 10ce.'

The funds corresponding to these amounts of allowances shall be distributed in accordance with Annex IIb.

The investments supported shall be consistent with the aims of this Directive, as well as the objectives of the Communication of the Commission of 11 December 2019 on 'The European Green Deal' and Regulation (EU) 2021/1119 and the long-term objectives as expressed in the Paris Agreement. When selecting investments for support from the Modernisation Fund under this Article, the beneficiary Member States shall apply criteria and procedures which are non-discriminatory and transparent. To this end, they shall continuously provide information about ongoing and upcoming calls for expression of interests, calls for proposals and calls for tenders financed by the Modernisation Fund. The beneficiary Member States shall establish effective and efficient management and control systems for their investments and ensure their proper functioning in accordance with the principle of sound financial management. The beneficiary Member States may, where appropriate, use the resources of the Modernisation Fund to finance investments involving the adjacent border regions within the Union. No support from the Modernisation Fund shall be provided to energy generation facilities that use fossil fuels or facilities that transport fossil fuels.'

(a) paragraph 2 is replaced by the following:

'2. At least 95 % of the revenue from allowances referred to in Article 10(1), third subparagraph, and from allowances covered by a notification pursuant to paragraph 4 of this Article, shall be used to support investments in the following:

(a) the generation and use of renewable energy sources, including biogas and biomethane;

(b) the reduction of overall energy use through energy efficiency by at least 20% in industry, transport and buildings, avoiding any risk of fossil fuel lock-in and fostering circularity, and the recovery of waste heat from incineration plants for district heating;

(c) electrification of demand side sectors including industry, buildings and transport;

(d) the modernisation and expansion of electricity, hydrogen, district heating and CO_2 infrastructure, including energy storage;

(e) industrial decarbonisation, including CCS and CCU and electrification;

(f) support for low-income households, including in rural and remote areas, to address energy poverty and to modernise their heating systems;

(g) a just transition in carbon-intensive regions in the beneficiary Member States to support the redeployment, reskilling and up-skilling of workers, education, job-seeking initiatives and start-ups accelerating the clean energy transition;

(h) the production of affordable low-carbon and bio-based fertilisers.';

(b) paragraph 4 is replaced by the following:

'4. All beneficiary Member States shall use the amount of allowances distributed for the purposes of solidarity, growth and interconnections within the Union specified in Article 10(2)(b) in accordance with Article 10d, to support investments within the framework of the Modernisation Fund, thereby increasing the resources available to them under the Fund. Any Member State concerned may also use the amount of allowances to be auctioned by that Member State in accordance with Article 10(2)(a), or part of that amount, in accordance with Article 10d, Where a Member State intends to use allowances referred to in Article 10(2)(a) under Article 10d, it shall inform the Commission of the relevant amount at the latest by 30 September of the preceding calendar year.'

(c) in paragraph 6, the second subparagraph is replaced by the following:

'Where an investment in line with the objectives of the Modernisation Fund, which is proposed to be financed from the Modernisation Fund, does not fall into the areas listed in paragraph 2, the investment committee shall assess the technical and financial viability of that investment, including the emission reductions it achieves, and issue a recommendation on financing the investment from the Modernisation Fund. The investment committee shall ensure that any investment financed from the Modernisation Fund achieves a substantial improvement in emission reductions and, where relevant, in energy efficiency. That recommendation may include suggestions regarding appropriate financing instruments. Up to 50% of the relevant costs of an investment which does not fall into the areas listed in paragraph 2 may be supported with resources from the Modernisation Fund provided that the remaining costs are financed by private legal entities.'

(d) the following sentence is added in the beginning of paragraph 10:

'Beneficiary Member States shall make public the information about recipients and other information referred to in Article 38(2) of Regulation (EU, Euratom) 2024/2509 where applicable in relation to support from the Modernisation Fund.'

(e) in paragraph 11, '2024' is replaced by '2036'.

(19) The following Article is inserted:

'Article 10da

Rule of Law

1. Beneficiary Member States shall ensure the respect of the principles of the rule of law as set out in Article 2, point (a), and Article 3 of Regulation (EU, Euratom) 2020/2092 throughout the implementation of the Modernisation Fund.

2. Appropriate measures as set out in paragraph 3 may be taken where it is established that the breaches of the principles of the rule of law referred to in Article 4(2) of Regulation 2020/2092 in a beneficiary Member State affect or seriously risk affecting the sound financial management of the Modernisation Fund in a sufficiently direct way.

3. Provided that the condition set out in the previous paragraph is fulfilled, one or more of the following appropriate measures may be adopted, following the procedure in Article 10db.

(a) a suspension of the adoption of the disbursement decision referred to in Article 10d (3);

(b) a suspension of disbursements under disbursement decisions already adopted;

The measures adopted shall respect the conditions provided for in paragraphs 2 to 5 of Article 5 of Regulation 2020/2092 as appropriate.

4. The measures shall be adopted in accordance with the procedure laid down in Article 6 of Regulation 2020/2092. When triggering the procedure, the Commission shall verify that no other means exist to protect the revenues managed under the Modernisation Fund more effectively.

5. The measures shall be lifted in accordance with the procedure laid down in Article 7 of Regulation 2020/2092.

(20) In Article 10f is amended as follows:

'Article 10f

'Do no significant harm' principle

Revenues generated from the auctioning of allowances destined for the Modernisation Fund pursuant to Article 10d, for the Innovation Fund pursuant to Article 10cb and for the Industrial Decarbonisation Bank pursuant to Article 10cc of this Directive shall be used in line with the principle of 'do no significant harm' referred to in Article 33(2), point (d) of Regulation of Regulation (EU, Euratom) 2024/2509.'

(21) in the title of Chapter IV, the word 'stationary' is deleted;

(22) Article 12 is amended as follows:

(a) paragraph 3 is amended as follows:

(i) point (b) is replaced by the following:

'(b) each aircraft operator surrenders a number of allowances that is equal to its total emissions during the preceding calendar year, as verified in accordance with Article 15, reduced as set out in paragraph 3-f to deduct costs incurred from CORSIA offsetting, and thereby avoid double charging.';

(ii) the following paragraphs are inserted after paragraph 3:

'3-g. By way of derogation from paragraph 3, first subparagraph, point (c), shipping companies may surrender fewer allowances than their verified emissions in respect of emissions released until 31 December 2035 from voyages from a port of call outside the jurisdiction of a Member State to a port of call under the jurisdiction of a Member State if performed by containerships of 10 000 TEU and above, if the distance of the voyage exceeds 300 nautical miles.

Where the shipping companies benefit from the derogation referred to in the first subparagraph, they may surrender fewer allowances than their verified emissions in respect of emissions released from the activities within a port in relation to the voyages referred to in the first subparagraph.

The amount of allowances to be surrendered in respect of the containership referred to in the first subparagraph at the port of call under the jurisdiction of a Member State, shall be reduced on the basis of the share of containers, measured in twenty-foot equivalent units, unloaded at the port of call under the jurisdiction of a Member State for the sole purpose of being loaded onto another ship, performing a voyage between the same port of call and a port of call outside the jurisdiction of a Member State, compared to the total number of containers unloaded by the containership.

Where fewer allowances are surrendered compared to the verified emissions, once the difference between verified emissions and allowances surrendered has been established in respect of each year, an amount of allowances corresponding to that difference shall be cancelled rather than auctioned pursuant to Article 10.

3-f. On routes subject to the offsetting requirement calculated pursuant to paragraph 6 of this Article, the reduction of the surrender obligation shall correspond to the aircraft operator's offsetting requirement, as calculated pursuant to paragraph 6 of this Article, in proportion to the extent the route is covered by the surrender obligation, multiplied by the ratio between the average price of allowances and the average price of credits eligible under Article 11a. The ratio shall be calculated using best available price indices for credits published in the carbon market report published pursuant to Article 10(5).

In case the cancelation of units pursuant to paragraph 9 does not take place for a certain period described in that paragraph, allowances shall be surrendered for the deductions that took already place for the years in that period, no later than 30 September of the year following the date of the notification of the final offsetting obligation.

In case the final offsetting requirement pursuant to paragraph 6 is not communicated to aircraft operators and the cancelation of units pursuant to paragraph 9 does not take place for a certain period described in that paragraph, allowances shall be surrendered for the deductions that took already place for the years in that period, no later than 30 September of the year following the due date of the notification of the final offsetting obligation.';

(b) in paragraphs 3-e, 3-d, 3-c, and 3-b, the date of '31 December 2030' is replaced by '31 December 2035';

(c) paragraph 3a is replaced by the following:

'3a. An obligation to surrender allowances shall not arise in respect of emissions verified as captured and transported for permanent storage to a facility for which a permit is in force in accordance with Directive 2009/31/EC of the European Parliament and of the Council *, or on a reciprocal basis from 2031 to a facility with a valid permit for geological storage in a third country with a greenhouse gas emissions trading system which is linked to the EU ETS pursuant to Article 25 of this Directive and in respect of which the Commission adopts an implementing decision confirming sufficient safeguards with respect to the rules set out in Directive 2009/31/EC are in place and provided the facility is not used for enhanced oil or gas recovery.

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* Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006 (OJ L 140, 5.6.2009, p. 114).'

(d) paragraph 3b is replaced by the following:

'3b. An obligation to surrender allowances shall not arise in respect of carbon dioxide emissions which are considered to have been captured and utilised in such a way that they have become:

(a) permanently chemically bound so that they do not enter the atmosphere under normal use, including any normal activity taking place after the end of the life of the product, or

(b) chemically bound so that they will be primarily emitted in activities listed in Annex I and subject to a surrender obligation under Article 12(3).

The Commission shall adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the requirements for considering that greenhouse gases have become permanently chemically bound or chemically bound as referred to in the first subparagraph of this paragraph, and list the types of utilisation that are considered to meet or not to meet these requirements. Those delegated acts may determine de minimis thresholds for the risk of not meeting those requirements and may introduce measures, such as partial surrender requirements, to address carbon leakage risks when these thresholds are exceeded.'

(e) paragraph (9) is replaced by the following:

'9. Aircraft operators that hold an air operator certificate issued by a Member State or are registered in a Member State, including in the outermost regions, dependencies and territories of that Member State, shall cancel units referred to in Article 11a only in respect of the quantity notified by that Member State, in accordance with paragraph 6, in respect of the relevant CORSIA compliance period. The cancellation shall take place by 31 January 2025 for emissions in the period 2021 to 2023, by 31 January 2028 for emissions in the period 2024 to 2026, by 31 January 2031 for emissions in the period 2027 to 2029, by 31 January 2034 for emissions in the period 2030 to 2032 and by 31 January 2037 for emissions in the period 2033 to 2035.';

(23) the following articles are inserted:

'Article 12a

Phase-in of requirements for waste incineration and waste co-incineration

Waste incineration and waste co-incineration installations that become subject to the system from 2031 shall be liable to surrender allowances according to the following schedule:

(a) 25% of verified emissions reported for 2031 that would be subject to surrender requirements in accordance with Article 12;

(b) 50% of verified emissions reported for 2032 that would be subject to surrender requirements in accordance with Article 12;

(c) 75 % of verified emissions reported for 2033 that would be subject to surrender requirements in accordance with Article 12;

(d) 100% of verified emissions reported for 2034 and each year thereafter in accordance with Article 12.

By way of derogation from the first paragraph of this Article, Member States may exempt waste incineration and waste co-incineration installations located in outermost regions within the meaning of Article 349 TFEU from the obligation to surrender allowances until 31 December 2035.

Article 12b

Opt-out for waste incineration and co-incineration

1. By way of derogation from Articles 12 and 12a, the competent authority of a Member State may exempt installations under the activity 'Waste incineration and waste co-incineration' referred to in Annex I, from the obligation to surrender allowances for the

emissions of a given reference year up to 2035, provided that the Member State demonstrates that at least two out of the following three conditions are met:

(a) The Member State concerned has a national carbon tax in force for the emissions of the years 2031 to 2035, covering the activity referred to in in Annex I; the national law setting the tax rates applicable for the years 2031 to 2035 has, by the date of notification in accordance with 31July 2029, entered into force; for the reference year, the national carbon tax of the Member State concerned effectively paid by that regulated entity is higher than the average auction clearing price of the emissions trading system established under this Chapter, adjusted for the gradual phase-in for the sector in accordance with Article 12a; the Member State concerned shall notify the Commission of any subsequent change to the national carbon tax;

(b) The Member State concerned has the policies in place to achieve the targets under Article 11(2)(d) and (e) of Directive 2008/98/EC and is on track to meet those targets;

(c) The Member State concerned has the policies in place to achieve the target under Article 5(5) of Directive 1999/31/EC and is on track to meet that target.

2. The Member State concerned shall cancel an amount of allowances from the total quantity of allowances to be auctioned by it, referred to in Article 10, for each reference year, which is equal to the verified emissions of the relevant installations for the reference year. The allowances shall be cancelled in accordance with the delegated acts adopted pursuant to Article 10(4).

3. By 31 July 2029, the Member State concerned shall notify the Commission of its request for the opt-out, demonstrating compliance with at least two out of the three conditions in paragraph 1, and indicating the corresponding amount of allowances to be cancelled in accordance with paragraph 2.

4. The derogation shall enter into force if the Commission does not raise an objection to the application of the derogation on the ground that the measure notified is not in conformity with the conditions set out in this paragraph, within three months of a notification under this paragraph.

5. The amount of allowances to be cancelled under paragraph 2 shall not affect, where it has been established pursuant to Article 311, third paragraph, TFEU, the own resources of the Union budget pursuant to Council Decision (EU, Euratom) 2020/2053 from the revenues generated from auctioning of allowances in accordance with Article 10 of this Directive.

6. The installations concerned shall continue to fully comply with the obligations under Article 14 on monitoring and reporting of its emissions and Article 15 on verification and accreditation.'

(24) Article 14 is amended as follows:

(a) in paragraph 1, the first subparagraph is replaced by the following:

'The Commission is empowered to adopt implementing acts concerning the detailed arrangements for the monitoring and reporting of emissions and, where relevant, activity data, from the activities listed in Annex I to this Directive, and non-CO_2 aviation effects on routes for which emissions are reported under this Directive, which shall be based on the principles for monitoring and reporting set out in Annex IV to this Directive and the requirements set out in paragraphs 2 and 5 of this Article. Those implementing acts shall also specify the global warming potential of each greenhouse gas and take into account up-to-date scientific knowledge on the effects of non-CO_2 aviation emissions in the requirements for monitoring and reporting of emissions and their effects, including non-CO_2 aviation effects. Such implementing acts shall provide for the application of the sustainability and greenhouse gas emission-saving criteria for the use of biomass established by Directive (EU) 2018/2001, with any necessary adjustments for application under this Directive, in order for such biomass to be zero-rated. They shall specify the order of capture and how to account the emissions from captured CO_2 from a mix of zero-rated and non-zero-rated sources. They shall also specify how to account for emissions from synthetic fuels, ensuring that such emissions are accounted for and that double counting is avoided. Carbon chemically bound in synthetic fuels shall be considered to be emitted by the activity of distribution of synthetic fuels established in Annex I.'

(b) the following paragraph is inserted:

'1a. The acts referred to in paragraph 1 shall provide for the possibility for operators, aircraft operators and shipping companies to compensate their fossil emissions with domestic permanent carbon removal units generated from the storage of their biogenic emissions under the scope of this Directive and certified under Regulation (EU) 2024/3012, while avoiding the double counting of those negative emissions.'

(25) Article 19 is amended as follows:

(a) in paragraph 1, the second subparagraph is deleted;

(b) the following paragraph is inserted after paragraph 1:

'1a. In the period until 2040, the Commission shall use up to a maximum of 5 million allowances from the Union-wide quantity of allowances referred to in Article 9 to cover expenses linked with the functioning and management of the EU ETS, including the financing of the operation of the Union Registry.

These allowances shall be auctioned in accordance with Article 10(4) of this Directive, with proceeds constituting external assigned revenue under Article 21(5) of Regulation (EU, Euratom) 2024/2509.

In the event that the allowances set aside under the first subparagraph of this paragraph are not auctioned for the purposes established in the first subparagraph of this paragraph before 2041, they shall be used to increase the amount available for new entrants pursuant to Article 10a(7).

The acts referred to in paragraph 3 of this Article shall specify the conditions, modalities and procedures under which the Central Administrator designated by the Commission pursuant to Article 20(1) shall make use of revenues from the auctioning of allowances pursuant to this paragraph.';

(26) Article 20 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. The Commission shall designate a Central Administrator to maintain a Union registry recording the issue, transfer and cancellation of allowances.';

(b) paragraph 2 is replaced by the following:

‘2. The Central Administrator shall conduct automated checks on each transaction in the Union registry to ensure there are no irregularities in the issue, transfer and cancellation of allowances.’;

(c) paragraph 3 is deleted;

(27) Article 21 is amended as follows:

(a) paragraph 1 is replaced by the following:

‘1. Each year the Member States shall submit to the Commission a report on the application of this Directive. That report shall pay particular attention to the arrangements for the allocation of allowances, the operation of registries, the application of the implementing measures on monitoring and reporting, verification and accreditation and issues relating to compliance with this Directive and on the fiscal treatment of allowances, if any. The first report shall be sent to the Commission by 30 June for every reporting year. The report shall be drawn up on the basis of a questionnaire or outline adopted by the Commission in the form of implementing acts. Such implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2). The questionnaire or outline shall be made available to Member States at least six months before the deadline for the submission of the first report and as early as possible before the deadline for the submission of each annual report thereafter, following a consultation process on a revised questionnaire with Member States where applicable.’;

(b) paragraph 2 is deleted;

(c) paragraph 3 is replaced by the following:

‘3. The Commission shall organise an exchange of information between the competent authorities of the Member States concerning developments relating to issues of allocation, the operation of registries, monitoring, reporting, verification, accreditation, information technology, and compliance with this Directive.’;

(d) paragraph 4 is replaced by the following:

‘4. Every three years, the report referred to in paragraph 1 shall also pay particular attention to the equivalent measures adopted for small installations excluded from the EU ETS. The issue of equivalent measures adopted for small installations shall also be considered in the exchange of information referred to in paragraph 2.’;

(28) Article 23 is amended as follows:

(a) paragraph 2 is replaced by the following:

‘2. The power to adopt delegated acts referred to in Article 3c(6), Article 3d(3), Article 3gaa, Article 3gab, Article 9c, Article 10(4), Article 10a(1), (8) and (8a), Article 10a(3e), Article 10b(5), Article 10cb(9), Article 10cc(6), Article 10cd(7), Article 10ce(9), Article 12(3b), Article 19(3), Article 22, Article 24(3), Article 24a(1), Article 25a(1), 25b(6) 25b(7), Article 28c and Article 30j(1) shall be conferred on the Commission for an indeterminate period of time from 8 April 2018.’

(b) paragraph 3 is replaced by the following:

‘3. The delegation of power referred to paragraph 2 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.’

(c) paragraph 6 is replaced by the following:

‘6. A delegated act adopted pursuant to the articles referred to in paragraph 2 shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.’

(29) Article 25a is amended as follows:

(a) paragraph 4 is replaced by the following:

‘4. In respect of emissions released until 31 December 2035 from flights to or from States that are listed in the implementing act adopted pursuant to paragraph 3 of this Article, aircraft operators shall not be required to surrender allowances in accordance with Article 12(3) in respect of those emissions.’;

(b) paragraph 8 is replaced by the following:

‘8. Where aircraft operators that hold an air operator certificate issued by a Member State or are registered in a Member State, including in the outermost regions, dependencies and territories of that Member State, operate flights between a Member State and a State listed in the implementing act adopted pursuant to paragraph 3 of this Article, or a flight between two different States listed in that implementing act, including flights that take place between Switzerland, the United Kingdom and States listed in the implementing act adopted pursuant to paragraph 3 of this Article, and those States allow aircraft operators to use units other than those on the list adopted pursuant to Article 11a(8) and that could lead to a significant distortion of competition, the Commission shall be empowered to adopt implementing acts, on the request of a Member State, allowing those aircraft operators to use unit types additional to those on the list or not to be bound by the conditions of Article 11a(2) and (3) in respect of emissions from such flights. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).’;

(30) the following Article 25b is inserted:

‘Article 25b

ETS as a service

1. Administrative and technical support and coordination may be provided for third countries to facilitate greenhouse gas emissions pricing (‘ETS as a service’), in particular in respect of emissions released from the following activities:

(a) aviation as set out in Annex I in respect of the emissions from flights between the EEA and the third country;

(b) maritime transport as set out in Annex I in respect of the remaining fifty percent (50%) of the emissions released during voyages between a port of call under the jurisdiction of a Member State and a port of call under the jurisdiction of the third country that fall outside the scope laid down in Article 3ga.

Such support shall be provided in respect of emissions from aviation from reporting year 2027 at the earliest, and in respect of emissions from maritime transport from reporting year 2029 at the earliest.

2. Where aviation or maritime emissions are priced pursuant to paragraph 1 of this Article, with an absolute emissions cap, the third country shall benefit from revenues to tackle climate change as follows:

(a) for aviation, for fifty percent (50%) of the aviation activity between the EEA and the third country;

(b) for maritime, for the remaining fifty percent (50%) of the emissions released during voyages between a port of call under the jurisdiction of a Member State and a port of call under the jurisdiction of the third country that fall outside of the scope laid down in Article 3ga.

In the absence of national auctioning of allowances, these allowances shall be auctioned by the Union on the common auction platform appointed pursuant to the delegated act adopted in accordance with Article 10(4) of this Directive and in accordance with the principles and modalities referred to in Article 10(4) of this Directive, with proceeds constituting external assigned revenue under Article 21(5) of Regulation (EU, Euratom) 2024/2509. The corresponding revenues generated from the auctioning of these allowances shall be transferred to the third country.

3. Where allowances are auctioned by the Union in accordance with paragraph 2 of this Article, the Union-wide quantity of allowances referred to in Article 9 shall be increased to take into account the coverage of emissions from aviation and maritime transport referred to in this Article, first paragraph, based on their emissions for the most recent year for which data are available. The linear reduction factor shall also apply to these allowances.

4. In advance of national administration procedures being in place in the relevant third countries, Member States which administer relevant aircraft operators and shipping companies shall undertake administrative functions in their regard. Optimum interaction shall be ensured for the administration of aircraft operators and shipping companies and for ensuring effective enforcement.

5. The Commission, assisted by EMSA, shall endeavour to make available the tools and guidance referred to in Article 18b(2).

6. The Commission is empowered to adopt delegated acts in accordance with Article 23 to amend Article 3ga(1) concerning the coverage of the remaining emissions released during voyages between ports of call under the jurisdiction of a Member State and the ports of call of a third country to which support is provided in accordance with this Article.

7. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Article with rules on the operation of ETS as a service, to ensure implementation of ETS as a service in accordance with this Article.';

(31) Article 28a is amended as follows:

(a) paragraph 1 is amended as follows:

(i) point (a) is replaced by the following:

‘(a) all emissions from flights departing from an aerodrome located in an outermost region of a Member State or in dependencies and territories to States outside the EEA, with the exception of flights to aerodromes located in the United Kingdom or Switzerland and to and from Gibraltar, in each calendar year from 1 January 2029 to 31 December 2032, subject to the review referred to in Article 28b, except for aircraft operators operating flights between two different States with total annual emissions lower than 10 000 tonnes per year calculated in accordance with Annex I;’;

(ii) the following points are is added after point (b):

’(c) all emissions from flights to and from least developed countries and small island developing States as defined by the United Nations listed in the implementing act adopted pursuant to Article 25a(3), other than those States whose GDP per capita equals or exceeds the Union average;

(d) all emissions from flights to and from aerodromes located in States outside the EEA, with the exception of flights to aerodromes located in the United Kingdom or Switzerland and to and from Gibraltar, in each calendar year from 1 January 2027 to 31 December 2028, except for aircraft operators operating flights between two different States with total annual emissions lower than 10 000 tonnes calculated in accordance with Annex I, for whom in each calendar year from 1 January 2027 to 31 December [2027/ the year before the entry into force of this Directive];

(e) all emissions from flights to aerodromes that are more than 5 000 km from the aerodrome of Frankfurt and located in States outside the EEA in each calendar year from 1 January 2029 to 31 December 2032, except for aircraft operators operating flights between two different States with total annual emissions lower than 10 000 tonnes calculated in accordance with Annex I. This point shall also apply in respect of aerodromes that are less than 5 000 km from the aerodrome of Frankfurt, are located in States outside the EEA and have less than 15 000 tonnes annual emissions from flights from the EEA to them.’;

(iii) the following subparagraph is added:

‘From 1 January 2027, the total quantity of allowances to be allocated in respect of aircraft operators as laid down in Article 3c(5) shall be increased annually whenever an extension of the coverage of flights subject to requirements pursuant to Article 12(3) takes place by the number of allowances equal to the emissions from such flights two years before such extension becomes effective, and from the subsequent year shall be subject to the application of the linear factor referred to in Article 9. That amount should be reduced by the amount equal to the total reductions of the surrender obligations pursuant to Article 12(3), point (b) resulting from an offsetting obligation pursuant to Article 12(6).’;

(b) paragraph 2 is replaced by the following:

‘2. By way of derogation from Article 3d(3), the quantity of allowances to be auctioned by each Member State in respect of the period from 1 January 2027 to 31 December 2032 shall be reduced to correspond to its share of attributed aviation emissions from flights which are not subject to the derogations provided for in Article 3c(8) and in paragraph 1, points (a) to (e) of this Article.’;

(c) paragraph 4 is replaced by the following:

‘4. By way of derogation from Articles 3g, 12, 15 and 18a of this Directive, where an aircraft operator has total annual emissions lower than 25 000 tonnes of CO_2, calculated in accordance with ‘Aviation’, point (j), of Annex I to this Directive, or where an aircraft operator has total annual emissions lower than 10 000 tonnes of CO_2 subject to surrender obligation pursuant to Article 12(3) of this Directive, point (b), not taking into account emissions for which the surrender obligation is considered to be satisfied under Article 3c(8) or Article 28a(1) of this Directive, its emissions shall be considered to be verified emissions if determined by using the small emitters tool approved under Commission Regulation (EU) No 606/2010 * and populated by Eurocontrol with data from its ETS support facility. Member States may implement simplified procedures for non-commercial aircraft operators as long as such procedures provide no less accuracy than the small emitters tool provides.

____

* Commission Regulation (EU) No 606/2010 of 9 July 2010 on the approval of a simplified tool developed by the European organisation for air safety navigation (Eurocontrol) to estimate the fuel consumption of certain small emitting aircraft operators (OJ L 175, 10.7.2010, p. 25 ELI: http://data.europa.eu/eli/reg/2010/606/oj.)’;

(d) the following paragraph is added:

‘6. In addition to the amount reserved for the use of eligible aviation fuels and electricity pursuant to Article 3c(6), taking into account the provisional restriction of the geographical scope pursuant to Article 28a(1), point (d), a further maximum 110 million allowances of the allowances referred to in third subparagraph of paragraph 1 shall be reserved for the purposes laid down in Article 3c(6) until 31 December 2040.

From 1 January 2029, the amount shall be available for all flights departing from an aerodrome loacted in the EEA, with the restrictions for business flights pursuant to Article 3c(6). From this date, the two last sentences of Article 3c(6), first subparagraph, shall not apply for the allocation of allowances pursuant to that Article.’;

(32) In Article 28b, the following paragraph is added:

‘(4) By 1 July 2032, the Commission shall submit to the European Parliament and to the Council a report in which it shall assess the environmental integrity of ICAO’s global market-based measure, including its general ambition in relation to targets under the Paris Agreement, the level of participation in offsetting under CORSIA, its enforceability, transparency, the penalties for non-compliance, the processes for public input, the quality of offset credits, monitoring, reporting and verification of emissions, registries, accountability as well as rules on the use of biofuels, with special regard to the developments happened since 2027. The Commission shall also publish that report by 1 July 2032.

The Commission's report shall be accompanied by a legislative proposal, where appropriate, to amend this Directive in a way that is consistent with the Paris Agreement temperature goal, the Union's economy-wide greenhouse gas emission reduction commitment for 2040 and the objective of achieving climate neutrality by 2050 at the latest, and with the aim of preserving the environmental integrity and effectiveness of the Union's climate action. An accompanying proposal shall, as appropriate, restrict the application of the EU ETS to flights between two aerodromes located in States in the EEA, to aerodromes located in Switzerland and the UK and to and from Gibraltar where the report shows that:

(a) CORSIA has been strengthened in line with achieving its long-term global aspirational goal, towards meeting the Paris Agreement goals; and

(b) States listed in the implementing act adopted pursuant to Article 25a(3) represent more than 70% of international aviation emissions using the most recent available data.';

(33) in Article 30 is amended as follows;

(a) in paragraph 7, first subparagraph, the sole footnote is deleted;

(b) the following paragraph is added:

'9. By 31 December 2034, the Commission shall present a report to the European Parliament and to the Council in which it shall assess the appropriateness of including in the EU ETS emissions from landfills. In that regard, the Commission shall take into account any potential evidence of diversion of waste towards disposal by landfilling. The Commission may, where appropriate, accompany that report with a legislative proposal to include landfills in the EU ETS.';

(34) in Article 30m, paragraph 3 is replaced by the following:

'Member States shall ensure the visibility of the source of the funding of actions or projects funded from the EU ETS auctioning revenues of which they determine the use in accordance with Article 3d(4), Article 10(3) and Article 30d(6), corresponding to what is referred to in paragraph 1, points (a) and (b), of this Article.';

(35) Annexes I to V are amended as set out in the Annexes to this Directive;

Article 2

Amendments to Decision (EU) 2015/1814

Article 1 of Decision (EU) 2015/1814 is amended as follows:

(1) in paragraph 4a, the first subparagraph is replaced by the following:

'As from 2024, the calculation of the total number of allowances in circulation in any given year shall include the cumulative number of allowances issued in respect of aviation and the cumulative tonnes of verified emissions from aviation under the EU ETS, excluding emissions from flights on routes covered by offsetting calculated pursuant to Article 12(6) of Directive 2003/87/EC, between 1 January 2024 and 31

December of that same given year. That calculation shall also cover the cumulative number of allowances issued in respect of aviation and the cumulative tonnes of verified emissions from aviation under the EU ETS, excluding emissions from flights on routes covered by offsetting calculated pursuant to Article 12(6) of Directive 2003/87/EC, over the period between 1 January 2012 and 31 December 2023';

(2) in paragraph 5, the first subparagraph is replaced by the following:

'In any given year, if the total number of allowances in circulation is between 833 million and 947 million, a number of allowances equal to the difference between the total number of allowances in circulation, as set out in the most recent publication as referred to in paragraph 4 of this Article, and 833 million shall be deducted from the quantity of allowances to be auctioned by the Member States under Article 10(2) of Directive 2003/87/EC and shall be placed in the reserve over a period of 12 months beginning on 1 September of that year. If the total number of allowances in circulation is above 947 million allowances, the number of allowances to be deducted from the quantity of allowances to be auctioned by the Member States under Article 10(2) of Directive 2003/87/EC and to be placed in the reserve over a period of 12 months beginning on 1 September of that year shall be equal to 12 % of the total number of allowances in circulation. From 2029, the thresholds of 833 and 947 million under this paragraph shall decrease annually by 4%, rounded to the nearest million, as specified in Annex I'.

(3) paragraph 6 is replaced by the following:

'6. In any year, if the total number of allowances in circulation is between 300 million and 400 million, a number of allowances equal to the difference between 400 million and the total number of allowances in circulation shall be released from the reserve. If the total number of allowances in circulation is less than 300 million, an amount of 100 million allowances shall be released from the reserve.

From 2029, the thresholds of 400 million and of 300 million and the amount of 100 million allowances to be released from the reserve, set out in the previous subparagraph, shall decrease annually by 4 %, rounded to the nearest million, as specified in Annex I.

Where fewer allowances are in the reserve than must be released in accordance with this paragraph, the release shall be equal to the allowances that remain in the reserve.

The amount of allowances released from the reserve under this paragraph shall be added to the volume of allowances to be auctioned by the Member States under Article 10(2) of Directive 2003/87/EC.'

Article 3

Transposition

1. Member States shall adopt and publish, by 31 December 2028 at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions.

They shall apply those provisions from 1 January 2029.

However, Member States shall apply those provisions necessary to comply with the following provisions from the following dates

(a) from 1 January 2031:

(i) Article 1, point (5), [as regards the new second paragraph of Article 3ga(1) of Directive 2003/87/EC] [N.B.: date of application may need to be changed to ensure it starts 2 years after MRV Maritime application in 2029];

(ii) Annex I, point 1(c)(iii) to (v) regarding the amendments to the activities on capture of carbon dioxide, transport of carbon dioxide, utilisation of carbon dioxide, processing of carbon dioxide and distribution of synthetic fuels in rows twenty-six, twenty-seven, and the rows inserted after the twenty-eight row in Annex I to Directive 2003/87/EC;

(a) from 1 January 2029: Annex I, point (1)(c)(vi), as regards the entry 'Maritime transport' in the table in Annex I to Directive 2003/87/EC;

(b) from 30 September 2029: Article 1, point (17)(d), regarding Article 10a(3b), Article 10a(3c), Article 10a(3d) of Directive 2003/87/EC as regards the five-year period for free allocation starting in 2031.

(c) from [date of application of MRV provisions related to offshore]: Article 1, point (3)(e), as regards Article 3, point (z) 'port of call' of Directive 2003/87/EC.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. By way of derogation from paragraph 1, Member States shall adopt and publish, by 31 December 2027 at the latest, the laws, regulations and administrative provisions necessary to comply with Article 1, points (3)(b), (12) and (17)(e) of this Directive regarding the amendment to Article 3(h) and the introduction of Article 6(4) and Article 10a(3f) of Directive 2003/87/EC. They shall apply those measures from 1 January 2028.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

Member States shall communicate to the Commission the text of the main measures of national law which they adopt in the field covered by this Directive.

Article 4

Transitional provisions

The list contained in the Annex to Delegated Decision (EU) 2019/708 shall continue to apply until 31 December 2040.

Article 5

Entry into force and application

1. This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

2. The following articles shall apply from 30 September 2027:

(a) Article 1(15)(b)(i), and (ii) regarding the amendments to Article 10a(1a) of Directive 2003/87/EC;

(b) Article 1(15)(g) and (i) regarding the amendments to Article 10a(5b) and 10a(7) of Directive 2003/87/EC;

(c) Article 1(17) regarding the introduction of Articles 10cc, 10cd and 10ce of Directive 2003/87/EC;

(d) Article 1(25)(b) regarding the amendments inserting paragraph 1a in Article 19 of Directive 2003/87/EC;

(e) Article 1(15)(c)(i) regarding the amendment inserting a new suparagraph after Article 10a(2), second subparagraph;

3. The following articles shall apply from 1 January 2029:

(a) Article 1(14)(c) regarding the amendments to Article 10(3);

(b) Article 1(15)(c)(ii) regarding the introduction of points (f) to (i) in the third subparagraph of Article 10a(2) of Directive 2003/87/EC;

4. Article 1(15)(b)(iii) regarding the use of the allowances resulting from the reduction of free allocation, Article 1(15)(f) regarding the replacement of Article 10a(5a), Article 1(15)(j) regarding the deletion of Article 10a(8) and 10a(8a) of Directive 2003/87/EC, Article 1(17) regarding the insertion of Article 10cb of Directive 2003/87/EC, Article 1(18) regarding the amendments to Article 10d of Directive 2003/87/EC, Article 1(20) regarding the amendments to Article 10f of Directive 2003/87/EC, and Article 1(35) regarding the amendments to Annex IIb of Directive 2003/87/EC, shall apply from 1 January 2031.

The Commission shall ensure that:

(c) ongoing projects approved or selected for funding under Article 10a(8) before 1 January 2031 remain eligible for disbursement in accordance with the rules in force at the time of approval;

(d) unallocated funds as of 31 December 2030 are transferred to Article 10cc.

Article 6

Addressees

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President

<u>**LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT**</u>

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC, Decision (EU) 2015/1814, Regulation (EU) 2015/757 and Regulation (EU) 2023/1805, as regards driving competitiveness and cost-effective decarbonisation.

1.2. Policy area(s) concerned

Climate Action

Heading 2 – Competitiveness, prosperity and security

1.3. Objective(s)

1.3.1. General objective(s)

The objective of this proposal is to ensure that the EU ETS continues to contribute in the most cost-effective, economically efficient and secure manner to the overall goal of reaching economy-wide carbon neutrality by 2050 and to the 2040 target, taking into account the broader policy framework and the need for all sectors to contribute to the EU climate efforts, while growing our economy and preserving competitiveness.

1.3.2. Specific objective(s)

• Objective 1.1 Incentivise further emission reductions: to ensure the EU ETS contributes cost-effectively to economy-wide efforts (including transport) of achieving emission reductions of the EU in line with climate neutrality and to contribute cost-effectively to the EU's fair share of economy-wide emissions reductions. The following specific objectives have been identified for O1.1:

o Specific Objective 1.1.1 Enable investments in decarbonisation technologies (both innovative ones and those ready for scale-up/roll-out) that currently do not yet have the business case (i.e. most of the technologies needed to address the emissions in the energy intensive industries, and in particular investments in mature decarbonisation technologies in carbon-intensive, low-income Member States).

o Specific Objective 1.1.2 Ensure full carbon price signal is applied to emissions sources which are currently not in the scope of the EU ETS but would be well suited for its coverage, and to sectors where currently the signal is dampened.

o Specific Objective 1.1.3 Address risk of carbon leakage.

• Objective 1.2 Reach a pre-set emissions reduction target provided by the 2040 policy package and with a net emissions calculation: exploring if the EU ETS gross emissions could be increased without compromising the sectors' contribution to economy-wide net emission reductions in line with climate neutrality, including exploring if the emission reduction efforts could be complemented with carbon removals. The following specific objectives have been identified for O1.2:

o Specific Objective 1.2.1 Consider how carbon removals can be integrated in the EU ETS with sufficient environmental safeguards while preserving cost efficiency in achieving the ETS/EU climate objectives.

o Specific Objective 1.2.2 Adjust EU ETS cap in line with pre-set target.

• Objective 1.3 Ensure effective EU climate action on transport emissions.

To ensure effective EU climate action means to ensure that there is a meaningful carbon price on the EU's fair share of international transport emissions.

• For aviation, the objective is to ensure a meaningful carbon price on the EU's fair share of international aviation emissions, which can be a complement to CORSIA.

• For maritime, the objective is to ensure coherence between any IMO mid-term measures and the EU ETS while addressing possible risk of significant double burden when (and if) payments are made due to IMO regulations in relation to emissions already priced under the EU ETS maritime, in a way that prevents environmental backsliding.

Thefollowing specific objectives have been identified for O1.3:

o Specific Objective 1.3.1 Ensure effective action on EU's fair share of aviation emissions

o Specific Objective 1.3.2 Preserve the effectiveness of the implementation of the EU ETS extension to maritime.

• Objective 2.1 Ensure efficient market functioning: this means ensuring that, in spite of a decreasing market, there is sufficient liquidity in the market so as to prevent trading frictions and excessive price volatility. The following specific objectives have been identified for O2.1:

o Specific Objective 2.1.1 Increase size of the market.

o Specific Objective 2.1.2 Adjust MSR parameters.

• Objective 2.2 Ensure a secure and compliant operating model for an enhanced Union Registry and specifically the financing of it.

1.3.3. *Expected result(s) and impact*

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

The current ETS legislation was revised in 2023 to deliver a 62% reduction in EU ETS emissions by 2030 compared to 2005. Since that revision, the EU has adopted a legally binding target of 90% reduction in net GHG emissions for 2040 compared to 1990 in order to stay on course for reaching climate neutrality by 2050.

The present initiative establishes the contribution of EU ETS to the post-2030 framework. Its main expected impacts are:

- aligning the ambition of the ETS to the 2040 target;

- integrating domestic permanent carbon removals into EU ETS through a public facility, creating additional emission space for the hardest-to-abate sectors and supporting the scale-up of the carbon removals industry;

- reforming the Market Stability Reserve to better equip it to deal with scarcity situations, supporting liquidity of the market;

- extending free allocation and indirect cost compensation beyond the currently legislated period, while free allocation is progressively made conditional on submission of climate neutrality plans and implementation of investments;

- increasing financial support to innovation and investment for decarbonisation, including for the industry, so a higher share of EU ETS revenues is returned to businesses, in particular via the Industrial Decarbonisation Bank.

- continuing the Innovation Fund to support low-carbon innovation and enhance competitiveness

- strengthening requirements on the of auction revenues going to Member States and enhance visibility

- continuing to support the modernisation of energy systems in lower income Member States. Enhancing the Modernisation Fund by updating eligibility criteria and distribution key, and continuing a redistribution of 10% of auction volume, ensuring effective carbon pricing of the EU's fair share of international transport emissions through an appropriate application of the EU ETS to departing flights, including avoidance of double-pricing through a deduction mechanism of CORSIA offsetting costs.

- establishing dedicated direct support for the uptake of EU-produced sustainable aviation and maritime fuels, clean technology and hydrogen.

- extending the maritime ETS scope to specific categories of small vessels to address the risk of evasion.

- simplifying measures for maritime monitoring, reporting and verification

- introducing targeted simplification elements to benefit industry and public authorities by reducing administrative compliance costs and enhancing system implementation.

- enabling a decarbonisation route for industries with hard-to-abate emissions by integrating municipal waste incineration into EU ETS and placing the CCU point of obligation downstream for products and at processor or distributor level for e-fuels.

- securing financial means to establish an enhanced Union Registry that will host implementation activities and securely manage the financial instruments.

1.3.4. *Indicators of performance*

Specify the indicators for monitoring progress and achievements.

Indicator nr 1: level of reduction of greenhouse gas emissions in the EU in 2040 90% reduction target compared to 1990 with a contribution of up to five percentage points from high-quality international credits, as enshrined in the European Climate Law.

Indicator nr 2: level of reduction of greenhouse gas emissions for the sectors in the existing EU Emissions Trading System (ETS) in 2040 and level of domestic permanent carbon removals

The levels of reduction of greenhouse gas emissions in the EU are reported under Regulation (EU) 2018/1999 and other secondary legislation related to monitoring and reporting in the ETS.

Indicator nr 3: establishing and managing an enhanced operating model for the Union Registry

1.4. The proposal/initiative relates to:

☐ a new action

☐ a new action following a pilot project / preparatory action[77]

✓ the extension of an existing action

☐ a merger or redirection of one or more actions towards another/a new action

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive and the Commission is to develop the relevant implementing measures.

Further measures to develop relevant implementing measures, starting after the adoption of the Directive, will include revising and adopting a number of secondary legislative acts. In particular, this will concern the secondary legislation setting out detailed rules on changes to the scope of EU ETS and the functioning of the funds, including Industrial Decarbonisation Bank and ETS investment booster, Innovation Fund and Modernisation Fund.

1.5.2. Added value of EU involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this section 'added value of EU involvement' is the value resulting from EU action, that is additional to the value that would have been otherwise created by Member States alone.

Climate change is a trans-boundary problem and both international and EU action can effectively complement and reinforce regional, national and local action. Adjusting the ETS to the 2040 target for EU GHG reductions will affect many sectors across the EU economy and coordinated action at the EU level is therefore indispensable and has a much bigger chance of leading to the necessary transformation, acting as a strong driver for cost-effective change and upward convergence. Furthermore, many of the policy elements assessed in this initiative have an important internal market dimension, in particular the options related to the carbon leakage protection and the low-carbon funding mechanisms. EU action can also inspire and promote the development of other market-based measures.

As a carbon market, the ETS incentivises emission reductions made by cost-effective solutions first across the activities it covers, achieving greater efficiency by virtue of its scale. Implementing a similar measure nationally would result in smaller, fragmented carbon markets, risking distortions of competition and likely lead to higher overall abatement costs. The same logic holds for the extension of carbon pricing to new sectors.

1.5.3. Lessons learned from similar experiences in the past

The ETS Directive is an existing EU policy instrument adopted in 2003. The Commission has gained valuable experience during more than 20 years for which the EU ETS has been in operation.

This proposal builds upon experience gathered in the previous EU ETS revisions and initiatives, including the most recent revision concluded in 2023, the adoption of a legally binding climate target for 2040, the EU Competitiveness Compass, Clean

[77] As referred to in Article 58(2), point (a) or (b) of the Financial Regulation.

Industrial Deal and AccelerateEU. The initiative also builds on the process based on integrated national energy and climate plans and the framework contained in the Governance Regulation.

1.5.4. Compatibility with the multiannual financial framework and possible synergies with other appropriate instruments

The estimated impact on expenditure and staffing for 2028 and beyond is added for illustrative purposes only and does not pre-judge the next Multiannual Financial Framework. The source of financing and scope of Union financial commitment in the post-2027 period remain subject to the outcome of interinstitutional negotiations on the MFF 2028-2034 and thereafter shall be determined through the annual budgetary procedure. All appropriations and staffing allocations as of 2028 are indicative.

This proposal is the first part of a package of measures to deliver the framework to deliver the new economy-wide 2040 target. The objective of this proposal is to ensure that the EU ETS continues to contribute in a cost-effective and economically efficient manner to the overall goal of reaching economy-wide carbon neutrality by 2050 and the 2040 target, taking into account the broader policy framework and the need for all sectors to contribute to the EU climate efforts, while growing our economy and preserving competitiveness.

This financial statement sets out how the Commission proposes to meet its resource requirements using a combination of external assigned revenues and EU funds (seeking funding from the European Competitiveness Fund for elements currently financed by the LIFE programme). See Section 3 for further details. The financial statement takes into account the EU ETS's contribution to EU Own Resources, as per the Commission proposal for the next MFF, whereby 30% of auction revenues pertaining to Member States would be transferred to the Union budget for this purpose. The proposal limits additional administrative costs by using, where possible, existing structures used for the Directive.

1.5.5. Assessment of the different available financing options, including scope for redeployment

The proposal involves making several changes to the scope of emissions (and removals) covered by the ETS as well as changes to its operation.

It proposes to cover the resource needs from a combination of external assigned revenues and EU budget funds (specifically the European Competitiveness Fund for elements currently covered by the LIFE programme).

See Section 3: estimated financial impact of the proposal.

1.6. **Duration of the proposal/initiative and of its financial impact**

☐ **limited duration**

– ☐ in effect from [DD/MM]YYYY to [DD/MM]YYYY

– ☐ financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

✓ **unlimited duration**

– Implementation with a start-up period from YYYY to YYYY,

– followed by full-scale operation.

1.7. **Method(s) of budget implementation planned**

✓ **Direct management** by the Commission

– ✓ by its departments, including by its staff in the Union delegations;

– ✓ by the executive agencies

☐ **Shared management** with the Member States

✓ **Indirect management** by entrusting budget implementation tasks to:

– ☐ third countries or the bodies they have designated

– ☐ international organisations and their agencies (to be specified)

– ✓ the European Investment Bank and the European Investment Fund

– ✓ bodies referred to in Articles 70 and 71 of the Financial Regulation

– ☐ public law bodies

– ☐ bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees

– ☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees

– ☐ bodies or persons entrusted with the implementation of specific actions in the common foreign and security policy pursuant to Title V of the Treaty on European Union, and identified in the relevant basic act

– ☐▪bodies established in a Member State, governed by the private law of a Member State or Union law and eligible to be entrusted, in accordance with sector-specific rules, with the implementation of Union funds or budgetary guarantees, to the extent that such bodies are controlled by public law bodies or by bodies governed by private law with a public service mission, and are provided with adequate financial guarantees in the form of joint and several liability by the controlling bodies or equivalent financial guarantees and which may be, for each action, limited to the maximum amount of the Union support.

Comments

The management of EU ETS allowances is done through legislation for which the Commission departments are responsible.

The Innovation Fund is largely implemented by European Climate, Infrastructure and Environment Executive Agency (CINEA). The proposal foresees additional responsibilities for CINEA in managing the Industrial Decarbonisation Bank, the facility for purchase of removals, as well as responsibilities for the European Maritime Safety Agency (EMSA) in implementing the MRV and ETS systems for maritime transport activities.

The Modernisation Fund operates under the responsibility of the beneficiary Member States, who work in close cooperation with the European Investment Bank (EIB), the Investment Committee set up for the fund and the European Commission.

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

The Commission will continue to monitor and evaluate the functioning of the ETS in its annual Carbon Market Report, as foreseen under Article 10(5) of the ETS Directive.

The Carbon Market Report and the overall evaluation of progress on the application of the ETS Directive is informed by Member State reports under Article 21, which requires Member States to submit to the Commission an annual report paying particular attention to issues including the allocation of allowances, operation of the Registry, application of monitoring and reporting, verification and accreditation and issues relating to compliance.

Both the Carbon Market Report as well as the Member States' reports cover also the impacts of the current revision of the ETS and shall also apply to the sectors to which emissions trading is extended. The MRV data obtained through the regulation of the new sectors will be a key source for information for the Commission to evaluate progress in the sectors concerned.

Finally, the Commission regularly carries out studies on various pertinent aspects of EU climate policy.

2.2. Management and control system(s)

2.2.1. Justification of the budget implementation method(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

Where applicable, the operational budget implementation mechanisms and payment modalities will be inspired by the existing arrangements for the Innovation Fund.

The control strategy will apply the set of controls stemming from the Financial Regulation for direct management

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

The EU ETS is the flagship policy mechanism to achieve the EU's emission reductions from around half the economy. Since 2013, the Commission is tasked to provide a Union Registry, an online database that provides an accurate accounting for all allowances transaction, a common auctioning platform for the auctioning of Member States allowances and the relevant support infrastructure for both. The Union Registry in which allowances are held under the EU ETS is threatened by a risk of fraudulent cyber-attacks that could result in theft or misappropriation of allowances leading to significant financial loss (up to several billion euros), legal litigation and considerable impact on Commission's reputation and credibility. The risk is cross-cutting and, alongside DG CLIMA, involves DG DIGIT, HR-DS, BUDG and LS. Mitigating measures have been put in place. The financial risk would increase in line with increases in the value of the carbon market. The distribution of free allowances at a very high total value also requires strict policies on how these allowances can be distributed, and assurance of respect of the rules in place. This involves management and control system at the level of the Member States and at the level of the Commission. Finally, adding new scope to the ETS will increase its overall breadth and correspondingly the value of the market and associated risk.

A High-level Steering Committee involving the lead DG and associated DGs is in place since 2011. A fully-fledged risk assessment has been conducted in 2014 which has identified new IT security measures taken as from 2015. As a result of the recommendations put forward by the IAS in its audit report on the Union Registry (IT security), measures to further improve the security of the registry system as well as measures on governance, quality assurance and testing have been implemented. Additional mitigating actions are being implemented since 2014.

In 2019, a new risk assessment was carried out for the Union Registry. DG CLIMA drafted a new security plan containing twelve security measures and implemented those in close collaboration with DIGIT.

Since 2022, yearly risk assessments result in yearly security plans which shall further strengthen the security of the Union Registry. Nevertheless, the outcome every year reconfirms that the Registry is exposed to high non-acceptable risk levels resulting in a reservation in the annual activity report of DG CLIMA.

The implementation is monitored at Senior Management level with regular Steering Committees between DG CLIMA and DIGIT.

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio between the control costs and the value of the related funds managed), and assessment of the expected levels of risk of error (at payment & at closure)

This initiative does not bring about new significant controls/risks that would not be covered be an existing internal control framework. No specific measures beyond the application of the Financial Regulation have been envisaged.

2.3. Measures to prevent fraud and irregularities

In response to the specific fraud risks for the EU ETS, DG CLIMA reinforced the Commission-wide guidelines regarding professional ethics and integrity by a dedicated "Code of Ethics and Conduct in relation to insider trading, fraud and disclosure of sensitive information", specific trainings, awareness raising initiatives. It also developed the EU ETS Sensitive Information Classification Policy and the related handling instructions with 3 levels of sensitivity. The related three ETS markings are approved by DG HR-DS (as referenced in Security Notice 1 in its revision 10). In 2019, DG HR-DS published security notice C(2019) 1904 updating Sensitive Non-Classifed (SNC) information policy. DG CLIMA, in alignment with this new policy, published new handling instructions for DG CLIMA SNC information. Appropriate training sessions for newcomers are organised on a regular basis.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

The estimated impact on expenditure and staffing for 2027 and beyond is added for illustrative purposes only and does not pre-judge the next Multiannual Financial Framework. The source of financing and scope of Union financial commitment in the post-2027 period remain subject to the outcome of interinstitutional negotiations on the MFF 2028-2034 and thereafter shall be determined through the annual budgetary procedure. All appropriations and staffing allocations are indicative.

With regards to staff increases unless decided otherwise in the context of the staff allocation procedure, new tasks are expected to be covered by redeployments within the lead DG.

In case of any discrepancy, the legal proposal for amendments to the Directive 2003/87/EC, Decision (EU) 2015/1814, Regulation (EU) 2015/757 and Regulation (EU) 2023/1805 takes precedence over information presented in this section.

Thematic summary of financial impact

Revenues

Own resources

From 2013 to end of 2025, EU ETS auctions have raised over EUR 258 billion in revenue, with the majority being allocated directly to Member States, and the remainder distributed through EU-level funds.

Under the Commission proposal on the next Multiannual Financial Framework, the EU ETS will for the first time make a contribution to EU Own Resources[78], calling for 30% of Member States' auction revenues to be transferred to the Union budget.

External assigned revenue

Fees: contribution from 3rd country linking: following provisional conclusion of the agreement linking the EU and UK emissions trading systems, it is foreseen that the UK will contribute to the aspects of EU ETS functioning.

Auctioning of allowances: the proposal includes amendments concerning the auctioning of ETS allowances and use of the proceeds as external assigned revenues for the following purposes:

- **Union Registry financing:** the proposal includes a provision to enable the Central Administrator (tasked with maintaining the Union Registry) to finance the functioning of the registry, and the facility for purchase of international credits foreseen in Article 9b of the legal proposal.
- Purchase of certified **permanent carbon removals**, in view of the expected cost differential between ETS allowances and removals.
- Funding the activities of the **Industrial Decarbonisation Bank, Innovation Fund** and **Modernisation Fund[79]**, including the investment booster.
- Funding activities aimed at facilitating pricing of greenhouse gas emissions in the **aviation** and **maritime** sectors in third countries.

[78] COM(2025)574 final. Proposal for a Council Decision on the system of own resources of the European Union and repealing Decision (EU, Euratom) 2020/2053.

[79] It is proposed for the Modernisation Fund to continue as an off-budget programme.

In addition to the resources mentioned above, the proposal will continue to generate auction revenues for use by Member States, and some allowances will continue to be allocated to installations for free to address the risk of carbon leakage.

See Section 3.3 of this statement for further detail on revenues

Resource needs

The resource needs related to implementation of this proposal are summarised thematically below. Further details are contained in the tables in sections 3.1 and 3.2 of this statement.

The Commission foresees making use of executive agencies for implementation of this proposal. Elements where this is foreseen are labelled p.m. (pro memoria) in the tables in Section 3.1, in keeping with Commission budgetary rules.

• **Union Registry:**

o Registry management activity is currently financed from the EU budget. This proposal seeks to raise external assigned revenue to fund the activity, which is necessary for the functioning of EU ETS, in particular in the context of an increasing number of users and the increased coverage of the EU ETS, the growing value of allowances held in the Union Registry and the increased security challenges. The enhanced operating model of the Union Registry is expected to employ 100 FTE staff (including some tasks currently financed through the EU budget).

o Future delegated acts will detail the conditions, modalities and procedures concerning the use of external assigned revenues generated by auctioning of allowances intended for Union Registry financing.

• **Permanent carbon removals**

o Preparation and implementation of a process for purchasing carbon removals, assessment of possible expansion to new removal types, integration of carbon removals into relevant systems including common auction platform, Union Registry and Carbon Removal Certification Framework registry. The administrative processes can build on the experiences from the Innovation Fund but will be lower due to a more limited number of technologies.

o Preparation of 2034 communication on progress regarding the purchase of domestic removals.

• **Industrial Decarbonisation Bank (both phase 1 – Investment Booster, 2027-30, and IDB phase 2, 2031-40)**

o Establishment of the Industrial Decarbonisation Bank and implementation of its activities set out in this proposal. The needs for operational and administrative expenditure are expected to comparable to the existing Innovation Fund, but are expected to be larger given the size of the fund, even once potential for synergies with existing activities is taken into account.

• **Innovation Fund**

o Extension of the Innovation Fund and implementation of improvements contained in this proposal.

• **Modernisation Fund**

o Extension of the Modernisation Fund and implementation of improvements and simplifications contained in this proposal (modify eligibility criteria and distribution key, extend eligible investment areas).

- **Aviation**

o Implementation of changes to scope and coverage of aviation set out in this proposal (increased coverage of business jets, support to uptake of sustainable aviation fuel, electrification and reducing of overall climate impacts, support to pricing of aviation greenhouse gas emissions in third countries).

- **Maritime**

o Implementation of changes to scope and coverage of maritime transport set out in this proposal (MRV simplification and enhancement elements, expanded scope, expanded monitoring of the evasion risk, IMO adjustments, measures to increase uptake of sustainable maritime propulsion (SMAP), support to pricing of maritime greenhouse gas emissions in third countries).

- **Stationary: addressing the risk of carbon leakage**

o Implementation of post-2030 measures to address carbon leakage risk (establishment of new benchmark values, potentially taking into account benchmarks in linked systems, implementation of rules, processes, oversight and capacity building for conditional free allocation).

- **Stationary: monitoring, reporting and verification of emissions**

o Implementation of post-2030 measures to further develop the legal framework for monitoring and reporting of emissions concerning rules for carbon capture and usage (CCU), rules for the accounting of cross-border carbon capture and storage and rules for emissions from landfills. Similar adjusts are need to the framework for verification of emissions reports and the accreditation of verifiers.

- **Stationary: waste and CCU**

o Implementation of proposed inclusion of waste incineration in the EU ETS, assessment of inclusion of landfill (for review in 2034).

o Implementation of proposed inclusion of non-permanent CCU, development of secondary legislation and monitoring framework.

- **Linking with 3rd country emissions trading systems**

o Implementation of adaptations to EU ETS as a result of 3rd country linking agreements (including with UK).

- **Development of single market for CO_2 (CCS market)**

o Development of legislation, safeguards and implementation systems necessary to enable ETS exemption for CO_2 captured, transported and permanently stored, including in third countries with a linked ETS, as proposed in the legal text.

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of	Budget line	Type of	Contribution

multiannual financial framework		expenditure				
	Number	Diff./Non-diff.[80]	from EFTA countries[81]	from candidate countries and potential candidates[82]	From other third countries	other assigned revenue
2	[XX.YY.YY.YY] successor of LIFE	Diff.	YES	YES	NO	YES
4	[XX.YY.YY.YY] EMSA subsidy	Diff.	YES	NO	NO	YES
2	[XX.YY.YY.YY] Innovation fund - support expenditure	Non Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] - Innovation fund - subsidy executive agency	Non Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] - Innovation Fund - operational expenditure	Diff.	NO	NO	NO	YES
4	[XX.YY.YY.YY] EMSA subsidy	Diff.	YES	NO	NO	YES
4	20 01 02 01 - Headquarters and Representation offices	Non Diff.	NO	NO	NO	NO
4	20 02 01 01 - Contract staff	Non Diff.	NO	NO	NO	NO
4	20 02 06 01 - Mission and representation expenses	Non Diff.	NO	NO	NO	NO
4	20 02 06 02 - Conference and meeting costs	Non Diff.	NO	NO	NO	NO

- New budget lines requested

<u>In order</u> of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.[83]	from EFTA countries[84]	from candidate countries and potential candidates[85]	From other third countries	other assigned revenue
2	[XX.YY.YY.YY] - carbon removal integration - support expenditure	Non Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] - carbon removal integration - subsidy executive agency	Non Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] carbon removal integration - operational expenditure	Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] - IBD - support expenditure	Non Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] - IBD - subsidy executive agency	Non Diff.	NO	NO	NO	YES
2	[XX.YY.YY.YY] IBD - operational expenditure	Diff.	NO	NO	NO	YES
4	[XX.YY.YY.YY] Union Registry financing – support expenditure	Non Diff.	NO	NO	YES	YES
4	[XX.YY.YY.YY] Union Registry financing – operational expenditure	Diff.	NO	NO	YES	YES

80 Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.
81 EFTA: European Free Trade Association.
82 Candidate countries and, where applicable, potential candidates from the Western Balkans.
83 Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.
84 EFTA: European Free Trade Association.
85 Candidate countries and, where applicable, potential candidates from the Western Balkans.

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

– ☐ The proposal/initiative does not require the use of operational appropriations

– ✓ The proposal/initiative requires the use of operational appropriations, as explained below

3.2.1.1. Appropriations from voted budget

EUR million (to three decimal places)

Heading of multiannual financial framework	2	

DG: <CLIMA>			Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
Operational appropriations										
[XX.YY.YY.YY] successor LIFE programme	Commitments	(1a)	3.900	2.900	3.400	2.600	5.200	2.600	1.800	**22.400**
	Payments	(2a)		3.900	2.900	3.400	2.600	5.200	2.600	**20.600**
Budget line	Commitments	(1b)								**0**
	Payments	(2b)								**0**
Appropriations of an administrative nature financed from the envelope of specific programmes[86]										
Budget line		(3)								**0**
TOTAL appropriations for DG <CLIMA>	Commitments	=1a+1b+3	**3.900**	**2.900**	**3.400**	**2.600**	**5.200**	**2.600**	**1.800**	**22.400**
	Payments	=2a+2b+3	**0.000**	**3.900**	**2.900**	**3.400**	**2.600**	**5.200**	**2.600**	**20.600**

86 Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

			Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL MFF 2028-2034
TOTAL operational appropriations	Commitments	(4)	3.900	2.900	3.400	2.600	5.200	2.600	1.800	22.400
	Payments	(5)	0.000	3.900	2.900	3.400	2.600	5.200	2.600	20.600
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	0,000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL appropriations under HEADING <2.> of the multiannual financial framework	Commitments	=4+6	**3.900**	**2.900**	**3.400**	**2.600**	**5.200**	**2.600**	**1.800**	**22.400**
	Payments	=5+6	**0.000**	**3.900**	**2.900**	**3.400**	**2.600**	**5.200**	**2.600**	**20.600**

EUR million (to three decimal places)

Heading of multiannual financial framework	4	'Administrative expenditure'[87]

DG: <CLIMA>	Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
• Human resources	3,451	4,243	4,243	4,033	4,033	4,033	4,033	**28,069**
• Other administrative expenditure	0,200	0,200	0,200	0,200	0,200	0,200	0,200	**1,400**

87 The necessary appropriations should be determined using the annual average cost figures available on the appropriate BUDGpedia webpage.

TOTAL DG <CLIMA>		**3,651**	**4,443**	**4,443**	**4,233**	**4,233**	**4,233**	**4,233**	**29,469**

TOTAL appropriations under HEADING 4 of the multiannual financial framework	(Total commitments = Total payments)	**3,615**	**4,443**	**4,443**	**4,233**	**4,233**	**4,233**	**4,233**	**29,469**

EUR million (to three decimal places)

		Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
TOTAL appropriations under HEADINGS 1 to 4	Commitments	**7.551**	**7.343**	**7.843**	**6.833**	**9.433**	**6.833**	**6.033**	**51.869**
of the multiannual financial framework	Payments	**3.651**	**8.343**	**7.343**	**7.633**	**6.833**	**9.433**	**6.833**	**50.069**

3.2.1.2. Appropriations from external assigned revenues

EUR million (to three decimal places)

Heading of multiannual financial framework	2	ETS funds

DG: <CLIMA – funds >			Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
Operational appropriations										
Budget line - IF operational expenditure	Commitments	(1a)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**

	Payments	(2a)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
Budget line - IBD - operational expenditure	Commitments	(1b)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
	Payments	(2b)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
Budget line - Carbon Removal - operational expenditure	Commitments	(1c)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
	Payments	(2c)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
Budget line - EMSA subsidy	Commitments	(1d)	4,028	4,028	4,028	3,698	3,698	3,698	3,698	26,877
	Payments	(2d)	4,028	4,028	4,028	3,698	3,698	3,698	3,698	26,877
Budget line - IF - support + subsidy EA		(3)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
Budget line -IBD - support + subsidy EA		(3)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
Budget line -carbon removal - support + subsidy EA		(3)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
TOTAL appropriations	Commitments	=1+3	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	p.m.
for DG <CLIMA>	Payments	=2+3	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	p.m.

			Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
TOTAL operational appropriations	Commitments	(4)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
	Payments	(5)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**

TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
TOTAL appropriations under HEADING 2 of the multiannual financial framework	Commitments	=4+6	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**
	Payments	=5+6	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**

Heading of multiannual financial framework	2	Registry financing

DG: <CLIMA - registry>			Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
Operational appropriations										
budget line [XX.YY.YY.YY] Registry - operational expenditure	Commitments	(1a)	2.604	11.126	17.636	14.275	14.275	14.275	14.275	**90,266**
	Payments	(2a)		2.604	11.126	17.636	14.275	14.275	14.275	**75,541**
Budget line	Commitments	(1b)								**0**
	Payments	(2b)								**0**
Appropriations of an administrative nature financed from the envelope of specific programmes[88]										
Budget line		(3)	6.604	14.178	23.491	23.491	23.491	23.491	23.491	138.239
TOTAL appropriations	Commitments	=1a+1b+3	**9.209**	**25.303**	**41.128**	**37.766**	**37.766**	**37.766**	**37.766**	**228,505**

88 Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

for DG < CLIMA - registry >	Payments	=2a+2b+3	**6.604**	**16.782**	**34.617**	**41.128**	**37.766**	**37.766**	**37.766**	**213,780**

			Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	**TOTAL MFF 2028-2034**
TOTAL operational appropriations	Commitments	(4)	2.604	11.126	17.636	14.275	14.275	14.275	14.275	**88.466**
	Payments	(5)		2.604	11.126	17.636	14.275	14.275	14.275	**74.191**
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	6,604	14.178	23.491	23.491	23.491	23.491	23.491	**138.239**
TOTAL appropriations under HEADING 2 of the multiannual financial framework	Commitments	=4+6	**9.209**	**25.303**	**41.128**	**37.766**	**37.766**	**37.766**	**37.766**	**226.705**
	Payments	=5+6	**6.604**	**16.782**	**34.617**	**41.128**	**37.766**	**37.766**	**37.766**	**212.430**

			Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	**TOTAL MFF 2028-2034**
• TOTAL operational appropriations (all operational headings)	Commitments	(4)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
	Payments	(5)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**
• TOTAL appropriations of an administrative nature financed from the envelope for specific programmes (all operational headings)		(6)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	**p.m.**

TOTAL appropriations under Headings 1 to 3 of the multiannual financial framework (Reference amount)	Commitments	=4+6	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**
	Payments	=5+6	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**

Heading of multiannual financial framework	4	'Administrative expenditure' – EMSA subsidy

DG: <CLIMA>		Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
• Human resources		0	0	0	0	0	0	0	**0**
• EMSA subsidy		4.032	4.032	4.032	3.702	3.702	3.702	3.702	**26.907**
• Other administrative expenditure		0	0	0	0	0	0	0	**0**
TOTAL DG <CLIMA>	Appropriations	**4.032**	**4.032**	**4.032**	**3.702**	**3.702**	**3.702**	**3.702**	**26.907**

TOTAL appropriations under HEADING 4 of the multiannual financial framework	(Total commitments = Total payments)	**4.032**	**4.032**	**4.032**	**3.702**	**3.702**	**3.702**	**3.702**	**26.907**

		Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028-2034**
TOTAL appropriations under	Commitments	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**

HEADINGS 1 to 4									
of the multiannual financial framework	Payments	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**	**p.m.**

3.2.2. *Estimated output funded from operational appropriations (not to be completed for decentralised agencies)*

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ⇩			**Year 2028**		**Year 2029**		**Year 2030**		**Year 2031**		**Year 2032**		**Year 2033**		**Year 2034**		**TOTAL 2028-2034**	
	OUTPUTS																	
	Type	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost
SPECIFIC OBJECTIVE No 1.1.2 - waste																		
Technical assistance on adapting MRV processes and regulations								0,500		0,500		0,500		0,500			**0**	**2,000**
Technical feasibility study and testing				0,500		0,500		0,500		0,500							**0**	**2,000**
SPECIFIC OBJECTIVE No 1.1.2 - CCU																		
Support study for revision of secondary legislation			1	0,500													**1**	**0,500**
Support study to assess implementation															1	0,500	**1**	**0,500**
Subtotal for specific objective No 1.1.2			**1**	**1,000**	**0**	**0,500**	**0**	**1,000**	**0**	**1,000**	**0**	**0,500**	**0**	**0,500**	**1**	**0,500**	**2**	**5,000**
SPECIFIC OBJECTIVE No 1.1.3 - carbon leakage																		
Sectoral fallback benchmarks, technical assistance for development				0,500		0,500		0,500									**0**	**1,500**
Free allocation: post-2030 continuation of NIMS and FA				0,500		0,500		0,500									**0**	**1,500**

processes																		
Free allocation: develop and implement conditionality rules				0,500		0,500		0,500									**0**	**1,500**
Free allocation: training & capacity building for NCAs										0,500		0,500		0,500			**0**	**1,500**
Free allocation: enhanced oversight, information to MS and administrative checks										0,500		0,500		0,500			**0**	**1,500**
Subtotal for specific objective No 1.1.3			**0**	**1,500**	**0**	**1,500**	**0**	**1,500**	**0**	**1,000**	**0**	**1,000**	**0**	**1,000**	**0**	**0,000**	**0**	**7,500**
SPECIFIC OBJECTIVE No 1.2.1 - carbon removal integration																		
Study for review in 2034											1	0,500					**1**	**0,500**
Study for expansion to new removal types											1	0,500					**1**	**0,500**
Study for purchasing programme											1	0,500					**1**	**0,500**
Communication on calls to purchase removals															1	0,200	**1**	**0,200**
Implementation of purchasing programme												0,500		0,200		0,200	**0**	**0,900**
Auction preparation (Common Auction Platform)												0,200		0,100		0,100	**0**	**0,400**
Registry changes (internal marking of allowances)												0,200		0,100		0,100	**0**	**0,400**
CRCF registry: cancellation of credits												0,200		0,100		0,100	**0**	**0,400**
Subtotal for specific objective No 1.2.1			**0**	**0,000**	**0**	**0,000**	**0**	**0,000**	**0**	**0,000**	**3**	**2,600**	**0**	**0,500**	**1**	**0,700**	**4**	**3,800**
SPECIFIC OBJECTIVE No 1.3.1 - aviation																		
update reporting template to reflect: increased geographic scope				0,100		0,100		0,100									**0**	**0,300**

update Eurocontrol small emitters tool (business jets)				0,100		0,100		0,100									**0**	**0,300**
update reporting template to reflect: SAF support				0,100		0,100		0,100									**0**	**0,300**
support 3rd country GHG pricing				0,500		0,500		0,500		0,500		0,500		0,500		0,500	**0**	**3,500**
Subtotal for specific objective No 1.3.1			**0**	**0,8**	**0**	**0,8**	**0**	**0,8**	**0**	**0,5**	**0**	**0,5**	**0**	**0,5**	**0**	**0,5**	**0**	**4,400**
SPECIFIC OBJECTIVE No 1.3.2 - maritime																		
Evasion risk (study, IT adaptations, real time monitoring)				0,100		0,100		0,100		0,100		0,100		0,100		0,100	**0**	**0,700**
study to assess upcoming IMO mechanism				0,500													**0**	**0,500**
Subtotal for specific objective No 1.3.2			**0**	**0,600**	**0**	**0,100**	**0**	**0,100**	**0**	**0,100**	**0**	**0,100**	**0**	**0,100**	**0**	**0,100**	**0**	**1,200**
TOTALS			**1**	**3,900**	**0,000**	**2,900**	**0,000**	**3,400**	**0**	**2,600**	**3,000**	**4,700**	**0,000**	**2,600**	**2**	**1,800**	**7**	**22,400**

3.2.3. Summary of estimated impact on administrative appropriations

– ☐ The proposal/initiative does not require the use of appropriations of an administrative nature

– ☐ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below

3.2.3.1. Appropriations from voted budget

VOTED APPROPRIATIONS	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034
HEADING 4								
Human resources	3,451	4,243	4,243	4,033	4,033	4,033	4,033	**28,069**
Other administrative expenditure	0,200	0,200	0,200	0,200	0,200	0,200	0,200	**1,400**
Subtotal HEADING 4	**3,651**	**4,443**	**4,443**	**4,233**	**4,233**	**4,233**	**4,233**	**29,469**
Outside HEADING 4								
Human resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
Other expenditure of an administrative nature	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
Subtotal outside HEADING 4	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
TOTAL	**3,651**	**4,443**	**4,443**	**4,233**	**4,233**	**4,233**	**4,233**	**29,469**

3.2.3.2. Appropriations from external assigned revenues

EXTERNAL ASSIGNED REVENUES	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034
HEADING 4								
Human resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
Other administrative expenditure	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
Subtotal HEADING 4	**4.032**	**4.032**	**4.032**	**3.702**	**3.702**	**3.702**	**3.702**	**26.907**
Outside HEADING 4								
Human resources	6,357	1,060	23,051	27,292	27,557	27,557	27,557	**153,866**
Other expenditure of an administrative nature (subsidy executive agency)	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
Other expenditure of an administrative nature	0.248	0.743	1.500	1.500	1.500	1.500	1.500	**8.490**
Subtotal outside HEADING 4	**6.604**	**13.528**	**22.352**	**26.356**	**26.626**	**26.626**	**26.626**	**148.719**
TOTAL	**6.604**	**13.528**	**22.352**	**26.356**	**26.626**	**26.626**	**26.626**	**148.719**

3.2.3.3. *Total appropriations*

TOTAL VOTED APPROPRIATIONS + EXTERNAL ASSIGNED REVENUES	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 – 2034
HEADING 4								
Human resources	3,451	4,243	4,033	4,033	4,033	4,033	4,033	**28,069**
Other administrative expenditure	0,200	0,200	0,200	0,200	0,200	0,200	0,200	**1,400**
Subtotal HEADING 4	**3,651**	**4,443**	**4,443**	**4,233**	**4,233**	**4,233**	**4,233**	**29,469**
Outside HEADING 4								
Human resources	6,357	14,495	23,051	27,292	27,557	27,557	27,557	**153,866**
Other expenditure of an administrative nature	0,248	0,743	1,500	1,500	1,500	1,500	1,500	**8,490**
Subtotal outside HEADING 4	**6,604**	**1,060**	**24,551**	**28,792**	**29,057**	**29,057**	**29,057**	**162,356**
TOTAL	**10,255**	**17,971**	**26,795**	**30,589**	**30,589**	**30,589**	**30,589**	**178,188**

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together, if necessary, with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

3.2.4. *Estimated requirements of human resources*

– ☐ The proposal/initiative does not require the use of human resources

– ✓ The proposal/initiative requires the use of human resources, as explained below

3.2.4.1. *Financed from voted budget*

Estimate to be expressed in full-time equivalent units (FTEs)

VOTED APPROPRIATIONS	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034
• Establishment plan posts (officials and temporary staff)							
20 01 02 01 (Headquarters and Commission’s Representation Offices)	14	17	17	17	17	17	17
20 01 02 03 (EU Delegations)	0	0	0	0	0	0	0
(Indirect research)	0	0	0	0	0	0	0
(Direct research)	0	0	0	0	0	0	0
Other budget lines (specify)	0	0	0	0	0	0	0
• External staff (in FTEs)							
20 02 01 (AC, END from the ‘global envelope’)	7	9	9	7	7	7	7
20 02 03 (AC, AL, END and JPD in the EU Delegations)	0	0	0	0	0	0	0

Admin. Support line [XX.01.YY.YY]	• at Headquarters	0	0	0	0	0	0	0
	• in EU Delegations	0	0	0	0	0	0	0
(AC, END - Indirect research)		0	0	0	0	0	0	0
(AC, END - Direct research)		0	0	0	0	0	0	0
Other budget lines (specify) - Heading 4		0	0	0	0	0	0	0
Other budget lines (specify) - Outside Heading 4		0	0	0	0	0	0	0
TOTAL		**21**	**26**	**26**	**24**	**24**	**24**	**24**

3.2.4.2. Financed from external assigned revenues

EXTERNAL ASSIGNED REVENUES		Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**
• Establishment plan posts (officials and temporary staff)								
20 01 02 01 (Headquarters and Commission's Representation Offices)		0	0	0	0	0	0	0
20 01 02 03 (EU Delegations)		0	0	0	0	0	0	0
(Indirect research)		0	0	0	0	0	0	0
(Direct research)		0	0	0	0	0	0	0
Other budget lines (registry)		24	48	80	80	80	80	80
• External staff (in full time equivalent units)								
20 02 01 (AC, END from the 'global envelope')		0	0	0	0	0	0	0
20 02 03 (AC, AL, END and JPD in the EU Delegations)		0	0	0	0	0	0	0
Admin. Support line [XX.01.YY.YY]	• at Headquarters	0	0	0	0	0	0	0
	• in EU Delegations	0	0	0	0	0	0	0
(AC, END - Indirect research)		0	0	0	0	0	0	0
(AC, END - Direct research)		0	0	0	0	0	0	0
Other budget lines (specify) - Heading 4		0	0	0	0	0	0	0
Other budget lines (specify) - Outside Heading 4		**4**	**22**	**28**	**60**	**62**	**62**	**62**
TOTAL		**28**	**70**	**108**	**140**	**142**	**142**	**142**

3.2.4.3. Total requirements of human resources

TOTAL VOTED APPROPRIATIONS + EXTERNAL ASSIGNED REVENUES	Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**
• Establishment plan posts (officials and temporary staff)							

20 01 02 01 (Headquarters and Commission's Representation Offices)		14	17	17	17	17	17	17
20 01 02 03 (EU Delegations)		0	0	0	0	0	0	0
(Indirect research)		0	0	0	0	0	0	0
(Direct research)		0	0	0	0	0	0	0
Other budget lines (specify)		24	48	80	80	80	80	80
• **External staff (in full time equivalent units)**								
20 02 01 (AC, END from the 'global envelope')		7	9	9	9	9	9	9
20 02 03 (AC, AL, END and JPD in the EU Delegations)		0	0	0	0	0	0	0
Admin. Support line [XX.01.YY.YY]	• at Headquarters	0	0	0	0	0	0	0
	• in EU Delegations	0	0	0	0	0	0	0
(AC, END - Indirect research)		0	0	0	0	0	0	0
(AC, END - Direct research)		0	0	0	0	0	0	0
Other budget lines (specify) - Heading 4		0	0	0	0	0	0	0
Other budget lines (specify) - Outside Heading 4		4	22	28	60	62	62	62
TOTAL		**49**	**96**	**134**	**164**	**166**	**166**	**166**

The staff required to implement the proposal (in FTEs):

	To be covered by current staff available in the Commission services	**Exceptional additional staff***		
		To be financed under Heading 4 or Research	**To be financed from BA line**	**To be financed from fees**
Establishment plan posts		17	N/A	80
External staff (CA, SNEs, INT)		9		62

Description of tasks to be carried out by:

Officials and temporary staff	Staff needs represent additional tasks necessary to implement the amended, expanded emisisons trading system (ETS) presented in this proposal. These include continued management and development of the Union Registry as well as implementation of measures related to maritime transport, management of carbon leakage prevention measures, linking with third country ETSs, expansion of EU ETS to waste and non-permanent carbon capture & utilisation (CCU) and a single market for captured CO_2.
External staff	Staff needs represent the need to continue the activities of the Innovation Fund and set up and implement the Industrial Decarbonisation Bank and purchase of permanent

	carbon removals, as well as clerical tasks related to the Union Registry.

3.2.5. Overview of estimated impact on digital technology-related investments

Resources requested in this proposal include activities that make use of existing IT systems. The need for additional IT investment will be re-visited in future proposals, in particular future delegated acts concerning functioning of the Union Registry, IT link with the UK ETS Registry and the enhanced Registry operation model.

TOTAL Digital and IT appropriations	Year **2028**	Year **2029**	Year **2030**	Year **2031**	Year **2032**	Year **2033**	Year **2034**	**TOTAL MFF 2028 - 2034**
HEADING 4								
IT expenditure (corporate)	0	0	0	0	0	0	0	**0**
Subtotal HEADING 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Outside HEADING 4								
Policy IT expenditure on operational programmes	0	0	0	0	0	0	0	**0**
Subtotal outside HEADING 4	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

3.2.6. Compatibility with the current multiannual financial framework

The proposal/initiative:

– ✓ can be fully financed through redeployment within the relevant heading of the multiannual financial framework (MFF)

The expenditure should be covered by a combination of MFF funds from the European Competitiveness Fund (the successor to the LIFE programme) and external assigned revenues.

– ☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation

– ☐ requires a revision of the MFF

3.2.7. Third-party contributions

The proposal/initiative:

– ☐ does not provide for co-financing by third parties

– ✓ provides for the co-financing by third parties estimated below:

The agreement linking the EU and UK emissions trading systems, foresees a contribution from the UK to the certain aspects of EU ETS functioning.

3.3. Estimated impact on revenue

– ☐ The proposal/initiative has no financial impact on revenue.

– ✓ The proposal/initiative has the following financial impact:

– ✓ on own resources

– ✓ on other revenue

– ☐ please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

For assigned revenue, specify the budget expenditure line(s) affected.

3 existing innovation fund budget lines New budget lines for IDB to be created (3) New budget lines for removals facility to be created (3) New budget lines for support to pricing of aviation greenhouse gas emissions in third countries New budget lines for support to pricing of maritime greenhouse gas emissions in third countries

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

The proposal foresees that that proceeds from auctioning of allowances should be made available for: - financing the functioning of the **Union Registry** and facility for purchase of international credits. - the purchase of permanent certified **carbon removals**, in view of the expected cost differential between removals and ETS allowances, and that the proceeds from this auctioning will count as externally assigned revenues. - the **Modernisation Fund**, a share of the cap will continue to be provided for this, an additional share will be allocated to beneficiary Member States through the Industrial Decarbonisation Bank. - the **Innovation Fund** with proceeds constituting externally assigned revenues. - the **Industrial Decarbonisation Bank** with proceeds constituting externally assigned revenues. Any income generated by the activities of the Bank will also constitute externally assigned revenue. - to facilitate pricing greenhouse gas emissions from the **aviation** and **maritime** sectors in third countries. In addition, the provisional agreement linking the EU and UK emissions trading systems, foresees a **contribution from the UK** to certain aspects of EU ETS functioning.

4. DIGITAL DIMENSIONS

N/A

4.1. Requirements of digital relevance

N/A

4.2. Data

N/A

4.3. Digital solutions

N/A

4.4. Interoperability assessment

N/A

4.5. Measures to support digital implementation

N/A