

**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

(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 (³),

Whereas:

- (1) The Paris Agreement (⁴), 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. That commitment has been reinforced with the adoption under the UNFCCC of the Glasgow Climate Pact on 13 November 2021, in which the Conference of the Parties to the UNFCCC, serving as the meeting of the Parties to the Paris Agreement, recognises that the impacts of climate change will be much lower at a temperature increase of 1,5 °C, compared with 2 °C, and resolves to pursue efforts to limit the temperature increase to 1,5 °C.
- (2) The urgency of the need to keep the Paris Agreement goal of 1,5 °C alive 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.
- (3) Tackling climate- and environmental-related challenges and reaching the objectives of the Paris Agreement are at the core of the communication of the Commission of 11 December 2019 on 'The European Green Deal' (the 'European Green Deal').
- (4) The European Green Deal combines a comprehensive set of mutually reinforcing measures and initiatives aimed at achieving climate neutrality in the Union by 2050, and sets out a new growth strategy that aims to transform the Union into a fair and prosperous society, with a modern, resource-efficient and competitive economy where economic growth is decoupled from resource use. It also aims to protect, conserve and enhance the Union's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts. This transition affects workers from various sectors differently. At the same time, that transition has gender equality aspects as well as a particular impact on some disadvantaged and vulnerable groups, such as older people, persons with disabilities,

(¹) OJ C 152, 6.4.2022, p. 175.

(²) OJ C 301, 5.8.2022, p. 116.

(³) Position of the European Parliament of 18 April 2023 (not yet published in the Official Journal) and decision of the Council of 25 April 2023.

(⁴) OJ L 282, 19.10.2016, p. 4.

persons with a minority racial or ethnic background and low and lower-middle income individuals and households. It also imposes greater challenges on certain regions, in particular structurally disadvantaged and peripheral regions, as well as on islands. It must therefore be ensured that the transition is just and inclusive, leaving no one behind.

- (5) On 17 December 2020, the Union submitted its nationally determined contribution (NDC) to the UNFCCC, following its approval by the Council. Directive 2003/87/EC of the European Parliament and of the Council (⁵), as amended by, inter alia, Directive (EU) 2018/410 of the European Parliament and of the Council (⁶), is one of the instruments cited, subject to revision in light of the enhanced 2030 target, in the general description of the target in the Annex to that submission. The Council stated in its conclusions of 24 October 2022 that it stands ready, as soon as possible after the conclusions of the negotiations on the essential elements of the 'Fit for 55' package, to update, as appropriate, the NDC of the Union and its Member States, in line with paragraph 29 of the Glasgow Climate Pact to reflect how the final outcome of the essential elements of the 'Fit for 55' package implements the Union headline target as agreed by the European Council in December 2020. As the EU Emissions Trading System (EU ETS), established by Directive 2003/87/EC, is a cornerstone of the Union's climate policy and constitutes its key tool for reducing greenhouse gas emissions in a cost-effective way, the amendments to Directive 2003/87/EC, including with regard to the scope thereof, adopted through this Directive are part of the essential elements of the 'Fit for 55' package.
- (6) The necessity and the value of delivering on the European Green Deal have only grown in light of the very severe effects of the COVID-19 pandemic on the health, the living and working conditions and the well-being of the Union's citizens. Those effects have shown that our society and our economy need to improve their resilience in relation to external shocks and act early to prevent or mitigate the effects of external shocks in a manner that is just and results in no one being left behind, including those at risk of energy poverty. European citizens continue to express strong views that this applies in particular to climate change.
- (7) The Union committed to reducing the Union's economy-wide net greenhouse gas emissions by at least 55 % compared to 1990 levels by 2030 in the updated NDC submitted to the UNFCCC Secretariat on 17 December 2020.
- (8) Through the adoption of Regulation (EU) 2021/1119 of the European Parliament and of the Council (⁷), the Union has enshrined in legislation the objective of economy-wide climate neutrality by 2050 at the latest and the aim of achieving negative emissions thereafter. That Regulation also establishes a binding Union domestic reduction target for net greenhouse gas emissions (emissions after deduction of removals) of at least 55 % compared to 1990 levels by 2030, and 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.
- (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 so as to be in line with the economy-wide net greenhouse gas emission reduction target for 2030, 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.

(⁵) Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32).

(⁶) Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (OJ L 76, 19.3.2018, p. 3).

(⁷) 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).

- (10) The EU ETS should incentivise production from installations that partly reduce or fully eliminate greenhouse gas emissions. Therefore, the description of some categories of activities in Annex I to Directive 2003/87/EC should be amended to ensure that installations performing an activity listed in that Annex and meeting the capacity threshold related to the same activity, but not emitting any greenhouse gases, are included within the scope of the EU ETS, and thereby ensure there is equal treatment of installations in the sectors concerned. In addition, free allocation for the production of a product should take into account, as guiding principles, the circular use-potential of materials and the fact that the benchmark should be independent of the feedstock or the type of production process, where the production processes have the same purpose. It is therefore necessary to modify the definition of the products and of the processes and emissions covered for some benchmarks, to ensure a level playing field for installations using new technologies that partly reduce or fully eliminate greenhouse gas emissions, and installations using existing technologies. Notwithstanding those guiding principles, the revised benchmarks for 2026 to 2030 should continue to distinguish between primary and secondary production of steel and aluminium. It is also necessary to decouple the update of the benchmark values for refineries and for hydrogen to reflect the increasing importance of production of hydrogen, including green hydrogen, outside the refineries sector.
- (11) Following the modification of the definitions of the products and of the processes and emissions covered for some benchmarks, it is necessary to ensure that producers do not receive double compensation for the same emissions with both free allocation and indirect costs compensation, and thus to adjust accordingly the financial measures to compensate indirect costs passed on in electricity prices.
- (12) Council Directive 96/61/EC⁽⁸⁾ was repealed by Directive 2010/75/EU of the European Parliament and of the Council⁽⁹⁾. The references to Directive 96/61/EC in Article 2 of Directive 2003/87/EC and in its Annex IV should be updated accordingly. Given the need for urgent economy-wide emission reductions, Member States should be able to act to reduce greenhouse gas emissions that are within the scope of the EU ETS also through policies other than emission limits adopted pursuant to Directive 2010/75/EU.
- (13) In its communication of 12 May 2021 entitled 'Pathway to a Healthy Planet for All - EU Action Plan: Towards Zero Pollution for Air, Water and Soil', the Commission calls for the steering of the Union towards zero pollution by 2050, by reducing air, freshwater, sea and soil pollution to levels which are no longer expected to be harmful for health and natural ecosystems. Measures under Directive 2010/75/EU, as the main instrument regulating air, water and soil pollutant emissions, will often also enable greenhouse gas emissions to be reduced. In line with Article 8 of Directive 2003/87/EC, Member States should ensure coordination between the permit requirements of Directive 2003/87/EC and those of Directive 2010/75/EU.
- (14) Recognising that new innovative technologies will often allow emissions of both greenhouse gases and pollutants to be reduced, it is important to ensure synergies between measures delivering reductions of emissions of both greenhouse gases and pollutants, in particular Directive 2010/75/EU, and review their effectiveness in this regard.
- (15) The definition of electricity generators was used to determine the maximum amount of free allocation to industry in the period from 2013 to 2020, but led to different treatment of cogeneration power plants compared to industrial installations. In order to incentivise the use of high efficiency cogeneration and to level the playing field for all installations receiving free allocation for heat production and district heating, all references to electricity generators in Directive 2003/87/EC should be deleted. In addition, Commission Delegated Regulation (EU) 2019/331⁽¹⁰⁾ specifies the details relating to the eligibility of all industrial processes for free allocation. Therefore, the provisions on carbon capture and storage in Article 10a(3) of Directive 2003/87/EC have become obsolete and should be deleted.

⁽⁸⁾ Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (OJ L 257, 10.10.1996, p. 26).

⁽⁹⁾ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

⁽¹⁰⁾ 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, p. 8).

- (16) Greenhouse gases that are not directly released into the atmosphere should be considered emissions under the EU ETS and allowances should be surrendered for those emissions unless they are stored in a storage site in accordance with Directive 2009/31/EC of the European Parliament and of the Council (⁽¹¹⁾), or they are permanently chemically bound in a product so that they do not enter the atmosphere under normal use and do not enter the atmosphere under any normal activity taking place after the end of the life of the product. The Commission should be empowered to adopt delegated acts specifying the conditions according to which greenhouse gases are to be considered as permanently chemically bound in a product so that they do not enter the atmosphere under normal use and do not enter the atmosphere under any normal activity after the end of the life of the product, including obtaining a carbon removal certificate, where appropriate, in view of regulatory developments with regard to the certification of carbon removals. Normal activity after the end of the life of the product should be understood broadly, covering all the activities taking place after the end of the life of the product, including reuse, remanufacturing, recycling and disposal, such as incineration and landfill.
- (17) International maritime transport activity, consisting of voyages between ports under the jurisdiction of two different Member States or between a port under the jurisdiction of a Member State and a port outside the jurisdiction of any Member State, has been the only means of transportation not included in the Union's past commitments to reduce greenhouse gas emissions. Emissions from fuel sold in the Union for voyages that depart in one Member State and arrive in a different Member State or a third country have grown by around 36 % since 1990. Those emissions represent close to 90 % of all Union navigation emissions, as emissions from fuel sold in the Union for voyages departing from and arriving in the same Member State have been reduced by 26 % since 1990. In a business-as-usual scenario, emissions from international maritime transport activities are projected to grow by around 14 % between 2015 and 2030 and by 34 % between 2015 and 2050. If the climate change impact of maritime transport activities grows as projected, it would significantly undermine reductions made by other sectors to combat climate change and therefore to achieve the economy-wide net greenhouse gas emission reduction target for 2030, the Union's climate-neutrality objective by 2050 at the latest, and the aim of achieving negative emissions thereafter, as laid down in Regulation (EU) 2021/1119, and the objectives of the Paris Agreement.
- (18) In 2013, the Commission adopted a strategy for progressively integrating maritime transport emissions into the Union's policy for reducing greenhouse gas emissions. As a first step in this approach, the Union established a system to monitor, report and verify emissions from maritime transport in Regulation (EU) 2015/757 of the European Parliament and of the Council (⁽¹²⁾), to be followed by the laying down of reduction targets for maritime transport and the application of a market-based measure. In line with the commitment of the co-legislators expressed in Directive (EU) 2018/410, action by the International Maritime Organization (IMO) or the Union should start from 2023, including preparatory work on adoption and implementation of a measure ensuring that the sector duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement, and due consideration being given by all stakeholders.
- (19) Pursuant to Directive (EU) 2018/410, the Commission should report to the European Parliament and to the Council on the progress achieved in the IMO towards an ambitious emission reduction objective, and on accompanying measures to ensure that maritime transport duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement. Efforts to limit global maritime emissions through the IMO are under way and should be encouraged, including the rapid implementation of the Initial IMO Strategy on Reduction of Greenhouse Gas Emissions from Ships, adopted in 2018, which also refers to possible market-based measures to incentivise greenhouse gas emission reductions from international shipping. However, while recently there has been progress in the IMO, this has so far not been sufficient to achieve the objectives of the Paris Agreement. Given the international character of shipping, it is important that the Member States and the Union within their respective competences work with third countries to step up diplomatic efforts to strengthen global measures and make progress on the development of a global market-based measure at IMO level.

(¹¹) 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).

(¹²) 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).

- (20) Carbon dioxide (CO₂) emissions from maritime transport account for around 3 to 4 % of Union emissions. In the European Green Deal, the Commission stated its intention to take additional measures to address greenhouse gas emissions from maritime transport through a basket of measures to enable the Union to reach its emission reduction targets. In this context, Directive 2003/87/EC should be amended to include maritime transport in the EU ETS in order to ensure that that sector contributes its fair share to the increased climate objectives of the Union as well as to the objectives of the Paris Agreement, which in Article 4(4) states that developed countries should continue to take the lead by undertaking economy-wide emission reduction targets, while developing countries are encouraged to move over time towards economy-wide emission reduction or limitation targets. While emissions from international aviation outside Europe were to be capped from January 2021 by global market-based action, an action that caps or puts a price on maritime transport emissions is not yet in place. It is therefore appropriate that the EU ETS cover a share of the emissions from voyages between a port under the jurisdiction of a Member State and a port under the jurisdiction of a third country, with the third country being able to decide on appropriate action in respect of the other share of emissions.

The extension of the EU ETS to maritime transport should thus include half of the emissions from ships performing voyages arriving at a port under the jurisdiction of a Member State from a port outside the jurisdiction of a Member State, half of the emissions from ships performing voyages departing from a port under the jurisdiction of a Member State and arriving at a port outside the jurisdiction of a Member State, all of the emissions from ships performing voyages arriving at a port under the jurisdiction of a Member State from a port under the jurisdiction of a Member State, and all of the emissions within a port under the jurisdiction of a Member State. This approach has been noted as a practical way to solve the issue of common but differentiated responsibilities and capabilities, which has been a longstanding challenge in the UNFCCC context. The coverage of a share of the emissions from both incoming and outgoing voyages between the Union and third countries ensures the effectiveness of the EU ETS, in particular by increasing the environmental impact of the measure compared to a geographical scope limited to voyages within the Union, while limiting the risk of evasive port calls and the risk of delocalisation of transhipment activities outside the Union. To ensure a smooth inclusion of the sector in the EU ETS, the surrendering of allowances by shipping companies should be gradually increased with respect to verified emissions reported for the years 2024 and 2025.

To protect the environmental integrity of the system, where fewer allowances are surrendered compared to verified emissions for maritime transport during those years, once the difference between verified emissions and allowances surrendered has been established each year, an amount of allowances corresponding to that difference should be cancelled. From 2026, shipping companies should surrender the number of allowances corresponding to all of their verified emissions. While the climate impact of maritime transport is mainly due to its CO₂ emissions, non-CO₂ emissions represent a significant share of emissions from ships. According to the Fourth IMO Greenhouse Gas Study 2020, methane emissions increased significantly over the period from 2012 to 2018. Methane and nitrous oxide emissions will likely grow over time, in particular with the development of vessels powered by liquefied natural gases or other energy sources. The inclusion of methane and nitrous oxide emissions would be beneficial for environmental integrity and for incentivising good practices. Those emissions should first be included in Regulation (EU) 2015/757 from 2024, and they should be included in the EU ETS from 2026.

- (21) The extension of the scope of Directive 2003/87/EC to maritime transport will lead to changes in the cost of such transport. All parts of the Union will be affected by that extension of scope as the goods transported to and from ports within the Union by maritime transport have their origin or destination in the different Member States, including in landlocked Member States. The allocation of allowances to be auctioned by the Member States should therefore, in principle, not change as a consequence of the inclusion of maritime transport activities, and should include all Member States. However, Member States will be affected to different extents. In particular, Member States with a high reliance on shipping will be most exposed to the effect of the extension. Member States with a large maritime sector compared to their relative size will be more affected by the extension of the EU ETS to maritime transport. It is therefore appropriate to provide additional time-limited assistance to those Member States in the form of additional allowances to support decarbonisation of maritime activities and for the administrative costs incurred. The assistance should be gradually introduced in parallel with the introduction of surrender obligations and thus with the increased effect on those Member States. Within the context of the review of Directive 2003/87/EC, the Commission should consider the relevance of that additional assistance in light, in particular, of the development in the number of shipping companies under the responsibility of different Member States.

- (22) The EU ETS should contribute significantly to reducing greenhouse gas emissions from maritime activities and to increasing efficiency in relation to such activities. The use of EU ETS revenues pursuant to Article 10(3) of Directive 2003/87/EC should include, inter alia, the promotion of climate-friendly transport and public transport in all sectors.
- (23) Renewing fleets of ice-class ships and developing innovative technology that reduces the emissions of such ships will take time and require financial support. Currently, the design of ice-class ships, which enables them to sail in ice conditions, leads to such ships consuming more fuel and emitting more than ships of similar size designed for sailing only in open water. Therefore, a flag-neutral method should be implemented under this Directive allowing for a reduction, until 31 December 2030, of allowances to be surrendered by shipping companies on the basis of their ships' ice class.
- (24) Islands with no road or rail link with the mainland are more dependent on maritime transport than the other regions and depend on maritime links for their connectivity. In order to assist islands with a small population to remain connected following the inclusion of maritime transport activities within the scope of Directive 2003/87/EC, it is appropriate to provide for the possibility for a Member State to request a temporary derogation from the surrender obligations under that Directive for certain maritime transport activities with islands with a population of fewer than 200 000 permanent residents.
- (25) It should be possible for Member States to request that a transnational public service contract or a transnational public service obligation between two Member States be temporarily exempted from certain obligations under Directive 2003/87/EC. That possibility should be limited to connections between a Member State without a land border with another Member State and the geographically closest Member State, such as the maritime connection between Cyprus and Greece, which has been absent for over two decades. That temporary derogation would contribute to addressing the compelling need to provide a service of general interest and ensure connectivity as well as economic, social and territorial cohesion.
- (26) 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 heavy dependence on maritime transport, special consideration should be given to preserving the accessibility of such regions and efficient connectivity by means of maritime transport. Therefore, a temporary derogation from certain obligations pursuant to Directive 2003/87/EC should be provided for emissions from maritime transport activities between a port located in an outermost region of a Member State and a port located in the same Member State, including ports located in the same outermost region and in another outermost region of the same Member State.
- (27) The provisions of Directive 2003/87/EC as regards maritime transport activities should be kept under review in light of future international developments and efforts undertaken to achieve the objectives of the Paris Agreement, including the second global stocktake in 2028, and subsequent global stocktakes every five years thereafter, intended to inform successive NDCs. Those provisions should also 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. In particular, the Commission should in its report take into account the level of participation in that global market-based measure, its enforceability, transparency, penalties for non-compliance, the processes for public input, the monitoring, reporting and verification of emissions, registries and accountability. Where appropriate, the report should be accompanied by a legislative proposal to amend Directive 2003/87/EC in a manner that is consistent with the Union 2030 climate target 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 any significant double burden, and thereby recalling the Union's competence to regulate its share of emissions from international shipping voyages, in line with the obligations of the Paris Agreement.

- (28) With the increased costs of shipping which the extension of Directive 2003/87/EC to maritime transport activities entails, there is, in the absence of a global market-based measure, a risk of evasion. Evasive port calls to ports outside of the Union and relocation of transhipment activities to ports outside of the Union will not only diminish the environmental benefits of internalising the cost of emissions from maritime transport activities but can also lead to additional emissions due to the extra distance travelled to evade the requirements of Directive 2003/87/EC. It is therefore appropriate to exclude from the definition of ‘port of call’ certain stops at non-Union ports. That exclusion should be targeted at ports in the Union’s vicinity where the risk of evasion is greatest. A limit of 300 nautical miles from a port under the jurisdiction of a Member State constitutes a proportionate response to evasive behaviour, balancing the additional burden and the risk of evasion. Moreover, the exclusion from the definition of ‘port of call’ should only apply to stops by container ships at certain non-Union ports, where the transhipment of containers accounts for most container traffic. For such shipments, the risk of evasion, in the absence of mitigating measures, also consists in port hubs being shifted to ports outside the Union, aggravating the effects of the evasion. 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.
- (29) The Commission should review the functioning of Directive 2003/87/EC in relation to maritime transport activities in the light of experience in applying that Directive, including detecting evasive behaviour in order to prevent such behaviour at an early stage, and should then propose measures to ensure the effectiveness of that Directive. Such measures could include increased surrender requirements for voyages where the evasion risk is higher, such as to and from a port that is located in the Union’s vicinity, in a third country that has not adopted measures similar to Directive 2003/87/EC.
- (30) Emissions from ships below 5 000 gross tonnage represent less than 15 % of emissions from ships, taking into account the scope of application of this Directive, but are emitted by a large number of ships. For reasons of administrative practicability, it is too early to include ships below 5 000 gross tonnage in the EU ETS from the start of the inclusion of maritime transport, but their inclusion in the future would improve the effectiveness of the EU ETS and potentially reduce evasive behaviour with the use of ships below the 5 000 gross tonnage threshold. Therefore, no later than 31 December 2026, 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 ships below 5 000 gross tonnage, including offshore ships.
- (31) The person or organisation responsible for the compliance with the EU ETS should be the shipping company, defined as the shipowner or any other organisation or person, such as the manager or the bareboat charterer, that has assumed the responsibility for the operation of the ship from the shipowner and that, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention. This definition is based on the definition of ‘company’ in Article 3, point (d), of Regulation (EU) 2015/757, and in line with the global data collection system established in 2016 by the IMO.
- (32) The emissions from a ship depend, *inter alia*, on the vessel energy efficiency measures taken by the shipowner, and on the fuel, the cargo carried and the route and the speed of the ship, which can be under the control of a different entity from the shipowner. The responsibilities for purchasing fuel or taking operational decisions that affect the greenhouse gas emissions of the ship can be assumed by an entity other than the shipping company under a contractual arrangement. At the time the contract is negotiated, the latter aspects, in particular, would not be known and thus the ultimate emissions from the ship covered by Directive 2003/87/EC would be uncertain. However, unless the carbon costs were passed on to the entity operating the ship, the incentives to implement operational measures for fuel efficiency would be limited. In line with the ‘polluter pays’ principle and to encourage the adoption of efficiency measures and the uptake of cleaner fuels, the shipping company should therefore be entitled, under national law, to claim reimbursement for the costs arising from the surrender of allowances from the entity that is directly responsible for the decisions affecting the greenhouse gas emissions of the ship.

While such a mechanism of reimbursement could be subject to a contractual arrangement, Member States should, to reduce administrative costs, not be obliged to ensure or check the existence of such contracts, but should instead provide for, in national law, a statutory entitlement for the shipping company to be reimbursed and the corresponding access to justice to enforce that entitlement. For the same reasons, that entitlement, including any possible conflict relating to the reimbursement between the shipping company and the entity operating the ship, should not affect the obligations of the shipping company vis-à-vis the administering authority in respect of a shipping company or the enforcement measures that might be necessary against such a company to ensure there is full compliance by that company with Directive 2003/87/EC. At the same time, as the purpose served by the provision concerning the entitlement to reimbursement is closely connected with the Union, in particular in relation to the compliance with obligations under this Directive by a shipping company vis-à-vis a given Member State, it is important that that entitlement be observed throughout the Union, in all contractual relations that allow an entity other than the shipowner to determine the cargo carried or the route and the speed of the ship, in a manner that safeguards undistorted competition in the internal market, which can include provisions preventing parties to such contractual agreements from circumventing the entitlement to reimbursement by including a choice of law clause.

- (33) In order to reduce the administrative burden on shipping companies, one Member State should be responsible for each shipping company. The Commission should publish an initial list of shipping companies that performed a maritime transport activity falling within the scope of the EU ETS, which specifies the administering authority in respect of a shipping company. The list should be updated regularly and at least every two years to reattribute shipping companies to another such administering authority as relevant. For shipping companies registered in a Member State, the administering authority in respect of a shipping company should be that Member State. For shipping companies registered in a third country, the administering authority in respect of a shipping company should be the Member State in which the shipping company had the greatest estimated number of port calls from voyages falling within the scope of Directive 2003/87/EC in the preceding four monitoring years. For shipping companies which are registered in a third country and which did not perform any voyage falling within the scope of Directive 2003/87/EC in the preceding four monitoring years, the administering authority in respect of a shipping company should be the Member State where a ship of the shipping company started or ended its first voyage falling within the scope of that Directive. The Commission should publish and update, as relevant, on a biennial basis a list of shipping companies falling within the scope of Directive 2003/87/EC, specifying the administering authority in respect of a shipping company. In order to ensure equal treatment of shipping companies, Member States should follow harmonised rules for the administration of shipping companies for which they have responsibility, in accordance with detailed rules to be established by the Commission.
- (34) Member States should ensure that the shipping companies that they administer comply with the requirements of Directive 2003/87/EC. In the event that a shipping company fails to comply with those requirements and any enforcement measures taken by the administering authority in respect of a shipping company have failed to ensure compliance, Member States should act in solidarity. As a last resort measure, Member States, except for the Member State whose flag the ship is flying, should be able to refuse entry to the ships under the responsibility of the shipping company concerned, and the Member State whose flag the ship is flying should be able to detain that ship.
- (35) Shipping companies should monitor and report their aggregated emissions data from maritime transport activities at company level in accordance with the rules laid down in Regulation (EU) 2015/757. The reports on aggregated emissions data at company level should be verified in accordance with the rules laid down in that Regulation. When performing verification at company level, the verifier should not verify the emissions reports at ship level or the reports at ship level to be submitted where there is a change of company, as those reports at ship level will have been already verified.
- (36) Based on experience from similar tasks related to environmental protection, the European Maritime Safety Agency (EMSA) or another relevant organisation should, as appropriate and in accordance with its mandate, assist the Commission and the administering authorities in respect of a shipping company in relation to the implementation of Directive 2003/87/EC. Owing to its experience with the implementation of Regulation (EU) 2015/757 and its IT tools, EMSA should assist the administering authorities in respect of a shipping company, in particular as regards the monitoring, reporting and verification of emissions generated by maritime transport activities under the scope of Directive 2003/87/EC, by facilitating the exchange of information or developing guidelines and criteria. The

Commission, assisted by EMSA, should endeavour to develop appropriate monitoring tools, as well as guidance to facilitate and coordinate verification and enforcement activities related to the application of Directive 2003/87/EC to maritime transport. As far as practicable, such tools should be made available to the Member States and the verifiers in order to better ensure robust enforcement of the national measures transposing Directive 2003/87/EC.

- (37) In parallel to the adoption of this Directive, Regulation (EU) 2015/757 is being amended to provide for monitoring, reporting and verification rules that are necessary for an extension of the EU ETS to maritime transport activities and to provide for the monitoring, reporting and verification of emissions of additional greenhouse gases and emissions from additional ship types.
- (38) Regulation (EU) 2017/2392 of the European Parliament and of the Council⁽¹³⁾ amended Article 12(3) of Directive 2003/87/EC to allow all operators to use all allowances that are issued. The requirement for greenhouse gas emissions permits to contain an obligation to surrender allowances, pursuant to Article 6(2), point (e), of that Directive, should be aligned accordingly.
- (39) Achieving the Union's emission reduction target for 2030 will require a reduction in the emissions of the sectors covered by the EU ETS of 62 % compared to 2005. The Union-wide quantity of allowances of the EU ETS needs to be reduced to create the necessary long-term carbon price signal and impetus for that degree of decarbonisation. The total quantity of allowances should be reduced in 2024 and 2026 to bring it more in line with actual emissions. Moreover, the linear reduction factor should be increased in 2024 and in 2028, also taking into account the inclusion of emissions from maritime transport. The steeper cap trajectory resulting from those changes will lead to significantly greater levels of cumulative emission reductions up to 2030 than would have occurred pursuant to Directive (EU) 2018/410. The figures relating to the inclusion of maritime transport should be derived from the emissions from maritime transport activities that are addressed in Article 3ga of Directive 2003/87/EC and reported in accordance with Regulation (EU) 2015/757 for 2018 and 2019 in the Union and the States of the European Economic Area and the European Free Trade Association, adjusted, from 2021 until 2024, by the linear reduction factor for the year 2024. The linear reduction factor should be applied in 2024 to the increase of the Union-wide quantity of allowances in that year.
- (40) Achieving the increased climate ambition will require substantial public and private resources in the Union as well as in Member States to be dedicated to the climate transition. To complement and reinforce the substantial climate-related spending in the Union budget, all auction revenues that are not attributed to the Union budget in the form of own resources, or the equivalent financial value of such auction revenues, should be used for climate-related purposes, with the exception of the revenues used for the compensation of indirect carbon costs. The list of climate-related purposes in Article 10(3) of Directive 2003/87/EC should be expanded to cover additional purposes with a positive environmental impact. This should include use for financial support to address social aspects in lower- and middle-income households by reducing distortive taxes and targeted reductions of duties and charges for renewable electricity. Member States should report annually on the use of auctioning revenues in accordance with Article 19 of Regulation (EU) 2018/1999 of the European Parliament and of the Council⁽¹⁴⁾, 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 and their territorial just transition plans.

⁽¹³⁾ Regulation (EU) 2017/2392 of the European Parliament and of the Council of 13 December 2017 amending Directive 2003/87/EC to continue current limitations of scope for aviation activities and to prepare to implement a global market-based measure from 2021 (OJ L 350, 29.12.2017, p. 7).

⁽¹⁴⁾ 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).

- (41) Member States' auctioning revenues will increase as a result of the inclusion of maritime transport in the EU ETS. Therefore, Member States are encouraged to increase the use of EU ETS revenues pursuant to Article 10(3) of Directive 2003/87/EC to contribute to the protection, restoration and better management of marine-based ecosystems, in particular marine protected areas.
- (42) Significant financial resources are needed to implement the goals of the Paris Agreement in developing countries and the Glasgow Climate Pact urges developed country Parties to urgently and significantly scale up their provision of climate finance. In its conclusions on the Preparations for the 27th Conference of the Parties to the UNFCCC (COP 27), the Council recalls that the Union and its Member States are the largest contributor to international public climate finance and have more than doubled their contribution to climate finance to support developing countries since 2013. In those conclusions, the Council also renews the strong commitment made by the Union and its Member States to continue scaling up their international climate finance towards the developed countries' goal of mobilising at least USD 100 billion per year as soon as possible and through to 2025 from a wide variety of sources, and expects the goal to be met in 2023.
- (43) To address the distributional and social effects of the transition in low-income Member States, an additional amount of 2,5 % of the Union-wide quantity of allowances from 2024 to 2030 should be used to fund the energy transition of the Member States with a gross domestic product (GDP) per capita below 75 % of the Union average in the years 2016 to 2018, through the Modernisation Fund referred to in Article 10d of Directive 2003/87/EC.
- (44) The beneficiary Member States should be able to use the resources allocated to the Modernisation Fund to finance investments involving the adjacent Union border regions when this is relevant to the energy transition of beneficiary Member States.
- (45) Further incentives to reduce greenhouse gas emissions by using cost-efficient techniques should be provided. To that end, the free allocation of emission allowances to stationary installations from 2026 onwards should be conditional on investments in techniques to increase energy efficiency and reduce emissions, in particular for large energy users. The Commission should ensure that the application of that conditionality does not jeopardise a level playing field, environmental integrity or equal treatment of installations across the Union. The Commission should therefore, without prejudice to the rules applicable under Directive 2012/27/EU of the European Parliament and of the Council⁽¹⁵⁾, adopt delegated acts supplementing this Directive to address any issue identified in particular on the above-mentioned principles and provide for administratively simple rules for the application of the conditionality. Those rules should be part of the general rules on free allocation, using the established procedure for national implementing measures, and provide for timelines, for criteria for the recognition of implemented energy efficiency measures, as well as for alternative measures to reduce greenhouse gas emissions. In addition, incentives to reduce greenhouse gas emissions should be further reinforced for installations with high greenhouse gas emission intensities. To that end, from 2026 onwards, the free allocation of emission allowances to the 20 % stationary installations with the highest emission intensities under a given product benchmark should also be conditional on the setting-up and implementation of climate-neutrality plans.
- (46) The Carbon Border Adjustment Mechanism (CBAM), established under Regulation (EU) 2023/956 of the European Parliament and of the Council⁽¹⁶⁾, is set to replace the mechanisms established under Directive 2003/87/EC to prevent the risk of carbon leakage. To the extent that sectors and subsectors are covered by that measure, they should not receive free allocation. However, a transitional phasing-out of free allowances is needed to allow producers, importers and traders to adjust to the new regime. The reduction of free allocation should be implemented by applying a factor to free allocation for CBAM sectors, while CBAM is phased in. The CBAM factor should 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, should be equal to 97,5 % in 2026, 95 % in 2027, 90 % in 2028, 77,5 % in 2029, 51,5 % in 2030, 39 % in 2031, 26,5 % in 2032 and 14 % in 2033. From 2034, no CBAM factor should apply.

⁽¹⁵⁾ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

⁽¹⁶⁾ Regulation (EU) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism (see page 52 of this Official Journal).

The relevant delegated acts on free allocation should be adjusted accordingly for the sectors and subsectors covered by CBAM. The free allocation no longer provided to the CBAM sectors based on this calculation (CBAM demand) is to be added to the Innovation Fund, so as to support innovation in low-carbon technologies, carbon capture and utilisation (CCU), carbon capture, transport and geological storage (CCS), renewable energy and energy storage, in a way that contributes to mitigating climate change. In this context, special attention should be given to projects in CBAM sectors. To respect the proportion of the free allocation available for non-CBAM sectors, the final amount to be deducted from the free allocation and made available under the Innovation Fund should be calculated based on the proportion that the CBAM demand represents in respect of the free allocation needs of all sectors receiving free allocation.

- (47) In order to mitigate potential carbon leakage risks related to goods subject to CBAM and produced in the Union for export to third countries which do not apply the EU ETS or a similar carbon pricing mechanism, an assessment should be carried out before the end of the transitional period under Regulation (EU) 2023/956. Where that assessment concludes that there is such a carbon leakage risk, the Commission should, where appropriate, submit a legislative proposal to address that carbon leakage risk in a manner that is compliant with the rules of the World Trade Organization. Moreover, Member States should be allowed to use auction revenues to address any residual risk of carbon leakage in CBAM sectors and in accordance with State aid rules. Where allowances coming from a reduction of free allocation in application of the conditionality rules are not fully used to exempt the installations with the lowest greenhouse gas emission intensity from the cross-sectoral correction, 50 % of those residual allowances should be added to the Innovation Fund. The other 50 % should be auctioned on behalf of Member States and they should use the revenue therefrom to address any residual risk of carbon leakage in CBAM sectors.
- (48) In order to better reflect technological progress while ensuring emission reduction incentives and properly rewarding innovation, the minimum adjustment of the benchmark values should be increased from 0,2 % to 0,3 % per year, and the maximum adjustment should be increased from 1,6 % to 2,5 % per year. For the period from 2026 to 2030, the benchmark values should thus be adjusted within a range of 6 % to 50 % compared to the value applicable in the period from 2013 to 2020. In order to provide predictability to installations, the Commission should adopt implementing acts determining the revised benchmark values for free allocation as soon as possible before the start of the period from 2026 to 2030.
- (49) To incentivise new breakthrough technologies in the steel industry and to avoid a significantly disproportionate reduction of the benchmark value and in light of the particular situation of the steel industry such as the high emission intensity and the international and Union market structure, it is necessary to exclude from the calculation of the hot metal benchmark value for the period from 2026 to 2030 installations that were operational during the reference period from 2021 to 2022 and that would otherwise be included in that calculation due to the review of the definition of the product benchmark for hot metal.
- (50) To reward best performers and innovation, installations whose greenhouse gas emission levels are below the average of the 10 % most efficient installations under a given benchmark should be excluded from the application of the cross-sectoral correction factor. Allowances that are not allocated due to a reduction of free allocation in application of the conditionality rules should be used to cover the deficit in the reduction of free allocation resulting from excluding best performers from the application of the cross-sectoral correction factor.
- (51) In order to speed up the decarbonisation of the economy while strengthening the industrial competitiveness of the Union, an additional 20 million allowances from the quantity which could otherwise be allocated for free and an additional 5 million allowances from the quantity which could otherwise be auctioned should be made available to the Innovation Fund. When reviewing the timing and sequencing of the auctioning for the Innovation Fund established in Commission Regulation (EU) No 1031/2010⁽¹⁷⁾ in view of the changes introduced by this Directive, the Commission should consider making available larger amounts of resources in the first years of implementation of the revised Directive 2003/87/EC to boost the decarbonisation of relevant sectors.

⁽¹⁷⁾ Commission Regulation (EU) No 1031/2010 of 12 November 2010 on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances pursuant to Directive 2003/87/EC of the European Parliament and of the Council establishing a system for greenhouse gas emission allowances trading within the Union (OJ L 302, 18.11.2010, p. 1).

- (52) A comprehensive approach to innovation is essential for achieving the objectives of Regulation (EU) 2021/1119. At Union level, the necessary research and innovation efforts are supported, among other things, through Horizon Europe, which includes significant funding and new instruments for the sectors coming under the EU ETS. Consequently, the Commission should seek synergies with Horizon Europe and, where relevant, with other Union funding programmes.
- (53) The Innovation Fund should support innovative techniques, processes and technologies, including the scaling-up of such techniques, processes and technologies, with a view to their broad roll-out across the Union. Breakthrough innovation should be prioritised in the selection of projects supported through grants.
- (54) The scope of the Innovation Fund referred to in Article 10a(8) of Directive 2003/87/EC should be extended to support innovation in low- and zero-carbon technologies and processes that concern the consumption of fuels in the buildings, road transport and additional sectors, including collective forms of transport such as public transport and coach services. In addition, the Innovation Fund should serve to support investments to decarbonise maritime transport, including investments in energy efficiency of ships, ports and short-sea shipping, in electrification of the sector, in sustainable alternative fuels, such as hydrogen and ammonia that are produced from renewables, in zero-emission propulsion technologies such as wind technologies, and in innovations with regard to ice-class ships. Special attention should be given to innovative projects contributing to decarbonising the maritime sector and reducing all of its climate impacts, including black carbon emissions. In that respect, the Commission should provide for dedicated topics in Innovation Fund calls for proposals. Those calls should take biodiversity protection, noise and water pollution issues into account. As far as maritime transport is concerned, projects with clear added value for the Union should be eligible.
- (55) Pursuant to Article 9 of Commission Delegated Regulation (EU) 2019/1122⁽¹⁸⁾, where aircraft operators no longer operate flights covered by the EU ETS, their accounts are set to 'excluded' status, and processes may no longer be initiated from those accounts. To preserve the environmental integrity of the EU ETS, allowances which are not issued to aircraft operators, due to them ceasing operations, should be used to cover any shortfall in surrenders by those operators, and any leftover allowances should be used to accelerate action to tackle climate change by being placed in the Innovation Fund.
- (56) Technical assistance from the Commission focused on Member States from which few or no projects have been submitted so far would contribute to achieving a high number of project applications for funding by the Innovation Fund across all Member States. That assistance should, among other things, support activities aimed at improving the quality of proposals for projects located in the Member States from which few or no projects have been submitted, for example through sharing information, lessons learned and best practice, and at boosting the activities of national contact points. Other measures serving the same aim include measures to raise awareness of funding options and increase the capacity of those Member States to identify and support potential project applicants. Project partnerships across Member States and matchmaking between potential applicants, in particular for large-scale projects, should also be promoted.
- (57) In order to improve the role of Member States in the governance of the Innovation Fund and increase transparency, the Commission should report to the Climate Change Committee on the implementation of the Innovation Fund, providing an analysis of the expected impact of awarded projects by sector and by Member State. The Commission should also provide the report to the European Parliament and to the Council and make it public. Subject to the agreement of applicants, following the closure of a call for proposals, the Commission should inform Member States of the applications for funding of projects in their respective territories and should provide them with detailed information of those applications in order to facilitate the Member States' coordination of the support to projects. In addition, the Commission should inform the Member States about the list of pre-selected projects prior to the award of the support. Member States should ensure that the national transposition provisions do not hamper innovation and are technologically neutral, while the Commission should provide technical assistance, in particular

⁽¹⁸⁾ Commission Delegated Regulation (EU) 2019/1122 of 12 March 2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards the functioning of the Union Registry (OJ L 177, 2.7.2019, p. 3).

to Member States with low effective participation, in order to improve the effective geographical participation in the Innovation Fund and increase the overall quality of submitted projects. The Commission should also ensure comprehensive monitoring and reporting, including information on progress towards effective, quality-based geographical coverage across the Union and appropriate follow-up.

- (58) In order to align with the comprehensive nature of the European Green Deal, the selection process for projects supported through grants should give priority to projects addressing multiple environmental impacts. In order to support the replication and the faster market penetration of the technologies or solutions that are supported, projects funded by the Innovation Fund should share knowledge with other relevant projects as well as with Union-based researchers having a legitimate interest.
- (59) Contracts for difference (CDs), carbon contracts for difference (CCDs) and fixed premium contracts are important elements for the triggering of emission reductions in industry through the scaling-up of new technologies, offering the opportunity to guarantee investors in innovative climate-friendly technologies a price that rewards CO₂ emission reductions above those induced by the prevailing carbon price level in the EU ETS. The range of measures that the Innovation Fund can support should be extended to provide support to projects through competitive bidding, leading to the award of CDs, CCDs or fixed premium contracts. Competitive bidding would be an important mechanism for supporting the development of decarbonisation technologies and optimising the use of available resources. It would also offer certainty to investors in those technologies. With a view to minimising any contingent liability for the Union budget, risk mitigation should be ensured in the design of CDs and CCDs and appropriate coverage by a budgetary commitment should be provided with full coverage at least for the first two rounds of CDs and CCDs with appropriations resulting from the proceeds of auctioning of allowances allocated pursuant to Article 10a(8) of Directive 2003/87/EC.

No such risks exist for fixed premium contracts because the legal commitment will be covered by a matching budgetary commitment. In addition, the Commission should conduct, after concluding the first two rounds of CDs and CCDs, and each time it is necessary thereafter, a qualitative and quantitative assessment of the financial risks arising from their implementation. The Commission should be empowered to adopt a delegated act to provide, based on the results of that assessment, for an appropriate provisioning rate rather than full coverage for subsequent rounds of CDs or CCDs. Such an approach should take into account any elements that could reduce the financial risks for the Union budget, in addition to the allowances available in the Innovation Fund, such as possible sharing of liability with Member States, on a voluntary basis, or a possible re-insurance mechanism from the private sector. It is therefore necessary to provide for derogations from parts of Title X of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council ⁽¹⁹⁾. The provisioning rate for the first two rounds of CDs and CCDs should be 100 %.

However, by way of derogation from Article 210(1), Article 211(1) and (2) and Article 218(1) of that Regulation, a minimum provisioning rate of 50 % as well as a maximum share of revenue from the Innovation Fund to be used for provisioning of 30 % should be set in this Directive for subsequent rounds of CDs and CCDs and the Commission should be able to specify the provisioning rate necessary on the basis of the experience from the first two calls for proposals and the amount of revenue to be used for provisioning. The total financial liability borne by the Union budget should thus not exceed 60 % of the proceeds from auctioning for the Innovation Fund. Moreover, as provisioning will come, in general, from the Innovation Fund, derogations should be made from the rules in Articles 212, 213 and 214 of Regulation (EU, Euratom) 2018/1046 relating to the common provisioning fund established by Article 212 of that Regulation. The novel nature of CDs and CCDs might also necessitate derogations from Article 209(2), points (d) and (h), of that Regulation, given that they do not rely on leverage/multipliers or depend entirely on an ex ante assessment, from Article 219(3), due to the link to Article 209(2), point (d), and from Article 219(6) thereof, as implementing partners will not have credit or equity exposures under a guarantee. The use of any derogation from Regulation (EU, Euratom) 2018/1046 should be limited to what is necessary. The Commission should be empowered to amend the maximum share of revenue from the Innovation Fund to be used for provisioning by no more than 20 percentage points above what is provided for in this Directive.

⁽¹⁹⁾ Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 (OJ L 193, 30.7.2018, p. 1).

- (60) The Innovation Fund is subject to the general regime of conditionality for the protection of the Union budget established by Regulation (EU, Euratom) 2020/2092 of the European Parliament and of the Council (20).
- (61) Where an installation's activity is temporarily suspended, free allocation is adjusted to the activity levels which are mandatorily reported annually. In addition, competent authorities can suspend the issuance of emission allowances to installations that have suspended operations as long as there is no evidence that they will resume operations. Therefore, operators should no longer be required to demonstrate to the competent authority that their installation will resume production within a specified and reasonable time in the event of a temporary suspension of the activities.
- (62) Corrections of free allocation granted to stationary installations pursuant to Article 11(2) of Directive 2003/87/EC can require granting additional free allowances or transferring back surplus allowances. The allowances set aside for new entrants under Article 10a(7) of Directive 2003/87/EC should be used for those purposes.
- (63) Since 2013, electricity producers have been obliged to purchase all the allowances they need to generate electricity. Nevertheless, in accordance with Article 10c of Directive 2003/87/EC, some Member States have the option of providing transitional free allocation for the modernisation of the energy sector for the period from 2021 to 2030. Three Member States have chosen to use that option. Given the need for rapid decarbonisation, especially in the energy sector, the Member States concerned should only be able to provide this transitional free allocation for investments carried out until 31 December 2024. They should be able to add any remaining allowances for the period from 2021 to 2030 that are not used for such investments, in the proportion they determine, to the total quantity of allowances that the Member State concerned receives for auctioning, or use them to support investments within the framework of the Modernisation Fund. With the exception of the deadline for notification thereof, allowances transferred to the Modernisation Fund should be subject to the same rules concerning investments that are applicable to the allowances already transferred pursuant to Article 10d(4) of Directive 2003/87/EC. To ensure predictability and transparency with regard to the amount of allowances available either for auctioning or for the transitional free allocation, and with regard to the assets managed by the Modernisation Fund, Member States should inform the Commission of the amounts of remaining allowances to be used for each purpose, respectively, by 15 May 2024.
- (64) The scope of the Modernisation Fund should be aligned with the most recent climate objectives of the Union by requiring that investments are consistent with the objectives of the European Green Deal and Regulation (EU) 2021/1119, and eliminating the support to any investments related to energy generation based on fossil fuels, except as regards the support for such investments with revenue from allowances voluntarily transferred to the Modernisation Fund in accordance with Article 10d(4) of Directive 2003/87/EC. In addition, limited support for such investments should continue to be possible with revenue from the allocations referred to in Article 10(1), third subparagraph, of that Directive under certain conditions, in particular where the activity qualifies as environmentally sustainable under Regulation (EU) 2020/852 of the European Parliament and of the Council (21) and as regards the allowances auctioned until 2027. For the latter category of allowances, the downstream uses of non-solid fossil fuels should, in addition, not be supported with revenue from allowances auctioned after 2028. Furthermore, the percentage of the Modernisation Fund that needs to be devoted to priority investments should be increased to 80 % for the Modernisation Fund allowances transferred in accordance with Article 10d(4) of Directive 2003/87/EC and referred to in Article 10(1), third subparagraph, of that Directive, and to 90 % for the additional amount of 2,5 % from the Union-wide quantity of allowances.

Energy efficiency including in industry, transport, buildings, agriculture and waste; heating and cooling from renewable sources; as well as support for households to address energy poverty, including in rural and remote areas, should be included within the scope of the priority investments. In order to increase transparency and better assess the impact of the Modernisation Fund, the Investment Committee should report annually to the Climate Change Committee on experience with the evaluation of investments, in particular in terms of emission reductions and abatement costs.

(20) 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 433 I, 22.12.2020, p. 1).

(21) Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (OJ L 198, 22.6.2020, p. 13).

- (65) Directive (EU) 2018/410 introduced provisions relating to the cancellation by Member States of allowances from their auction volume in respect of closures of electricity-generation capacity in their territory. In view of the increased climate ambition of the Union and the resulting accelerated decarbonisation of the electricity sector, such cancellation has become increasingly relevant. Therefore, the Commission should assess whether the use by Member States of cancellation can be facilitated by amending the relevant delegated acts adopted pursuant to Article 10(4) of Directive 2003/87/EC.
- (66) Adjustments to free allocation introduced in Directive (EU) 2018/410 and put into effect by Commission Implementing Regulation (EU) 2019/1842 (⁽²²⁾) improved the efficiency and incentives provided by free allocation, but increased the administrative burden and rendered the historical date of issuance of free allocation of 28 February inoperative. In order to better take into account the adjustments to free allocation, it is appropriate to make adjustments to the compliance cycle. The deadline for competent authorities to grant free allocation should therefore be postponed from 28 February to 30 June and the deadline for operators to surrender allowances should be postponed from 30 April to 30 September.
- (67) Commission Implementing Regulation (EU) 2018/2066 (⁽²³⁾) lays down rules on the monitoring of emissions from biomass, which are consistent with the rules on the use of biomass laid down in the Union legislation on renewable energy. As the legislation becomes more elaborate on the sustainability criteria for biomass with the latest rules established in Directive (EU) 2018/2001 of the European Parliament and of the Council (⁽²⁴⁾), the conferral of implementing powers in Article 14(1) of Directive 2003/87/EC should be explicitly extended to the adoption of the necessary adjustments for the application in the EU ETS of sustainability criteria for biomass, including biofuels, bioliquids and biomass fuels. In addition, the Commission should be empowered to adopt implementing acts to specify how to account for the storage of emissions from mixes of zero-rated biomass and biomass that is not from zero-rated sources.
- (68) Renewable liquid and gaseous fuels of non-biological origin and recycled carbon fuels can be important for reducing greenhouse gas emissions in sectors that are hard to decarbonise. Where recycled carbon fuels and renewable liquid and gaseous fuels of non-biological origin are produced from captured CO₂ under an activity covered by this Directive, the emissions should be accounted for under that activity. To ensure that renewable fuels of non-biological origin and recycled carbon fuels contribute to greenhouse gas emission reductions, and to avoid double counting for fuels that do so, it is appropriate to explicitly extend the empowerment in Article 14(1) of Directive 2003/87/EC to the adoption by the Commission of implementing acts laying down the necessary adjustments for how to account for the eventual release of CO₂, in a way that ensures that all emissions are accounted for, including where such fuels are produced from captured CO₂ outside the Union, while avoiding double counting and ensuring appropriate incentives are in place for capturing emissions, taking also into account the treatment of those fuels under Directive (EU) 2018/2001.
- (69) As CO₂ is also expected to be transported by means other than pipelines, such as by ship and by truck, the current coverage in Annex I to Directive 2003/87/EC for transport of greenhouse gases for the purpose of storage should be extended to all means of transport for reasons of equal treatment and irrespective of whether the means of transport are covered by the EU ETS. Where the emissions from the transport are also covered by another activity under Directive 2003/87/EC, the emissions should be accounted for under that other activity to prevent double counting.

(²²) 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, p. 20).

(²³) 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, p. 1).

(²⁴) 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).

- (70) The exclusion from the EU ETS of installations exclusively using biomass has led to situations where installations combusting a high share of biomass have obtained windfall profits by receiving free allowances greatly exceeding actual emissions. Therefore, a threshold value for zero-rated biomass combustion should be introduced, above which installations are excluded from the EU ETS. The introduction of a threshold would provide more certainty as to which installations are under the EU ETS scope and would enable free allowances to be more evenly distributed to sectors more at risk of carbon leakage in particular. The threshold should be set at a level of 95 % to balance the advantages and disadvantages for installations of remaining under the scope of the EU ETS. Therefore, installations that have retained the physical capacity to burn fossil fuels should not be incentivised to revert to the use of such fuels. A threshold of 95 % would ensure that if an installation uses fossil fuels with the purpose of remaining within the scope of the EU ETS to benefit from free allocation allowances, the carbon costs related to the use of those fossil fuels would be sufficiently important to act as a disincentive.

That threshold would also ensure that installations using a sizeable quantity of fossil fuels will remain within the monitoring obligations of the EU ETS, thus avoiding potential circumvention of existing monitoring, reporting and verification obligations. At the same time, installations which combust a lower share of zero-rated biomass should continue to be encouraged, through a flexible mechanism, to reduce fossil fuel combustion further while remaining under the scope of the EU ETS until their use of sustainable biomass is so substantial that their inclusion under the EU ETS is no longer justified. In addition, experience has shown that the exclusion of installations exclusively using biomass, effectively being a 100 % threshold except for the combustion of fossil fuels during start-up and shutdown phases, requires a reassessment and more precise definition. The 95 % threshold allows for the combustion of fossil fuels during start-up and shutdown phases.

- (71) In order to incentivise the uptake of low- and zero-carbon technologies, Member States should provide operators with the options of remaining within the scope of the EU ETS until the end of the current and next five-year period referred to in Article 11(1) of Directive 2003/87/EC if the installation changes its production process to reduce its greenhouse gas emissions and no longer meets the threshold of 20 MW of total rated thermal input.

- (72) The European Securities and Markets Authority (ESMA) published its final report on emission allowances and associated derivatives on 28 March 2022. The report is a comprehensive analysis of the integrity of the European carbon market and has provided expertise and recommendations in relation to upholding the proper functioning of the carbon market. In order to continuously monitor market integrity and transparency, the reporting by ESMA should be conducted on a regular basis. ESMA is already assessing market developments and, where necessary, provides recommendations, in the area of its competence, in its report on trends, risks and vulnerabilities in accordance with Article 32(3) of Regulation (EU) No 1095/2010 of the European Parliament and of the Council⁽²⁵⁾. Analysis of the European carbon market, which includes the auctions of emission allowances, on-venue and over-the-counter trading in emission allowances and derivatives thereof, should be part of that annual reporting. This obligation would lead to streamlining of the reporting done by ESMA and allow for cross-market comparisons, in particular due to strong linkages between the EU ETS and commodity derivative markets.

Such regular analysis by ESMA should in particular monitor any market volatility and price evolution, the operation of the auctions and trading operations on the markets, liquidity and the volumes traded, and the categories and trading behaviour of market participants, including speculative activity significantly impacting on prices. Its assessments should, where relevant, include recommendations to improve market integrity and transparency as well as reporting obligations, and to enhance the prevention and detection of market abuse and help in maintaining orderly markets for emission allowances and derivatives thereof. The Commission should take due account of the assessments and recommendations in the context of the annual carbon market report and, where necessary, in the reports to ensure the better functioning of the carbon market.

⁽²⁵⁾ Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC (OJ L 331, 15.12.2010, p. 84).

- (73) In order to further incentivise investments required for the decarbonisation of district heating and to address social aspects related to high energy prices and the high greenhouse gas emission intensity of district heating installations, in Member States with a very high share of emissions from district heating in comparison with the size of the economy, operators should be able to apply for additional transitional free allocation for district heating installations and the additional value of the free allocation should be invested to significantly reduce emissions before 2030. To ensure those reductions take place, the additional transitional free allocation should be conditional on investments made and on emission reductions achieved as laid down in climate-neutrality plans to be drawn up by operators for their relevant installations.
- (74) Unexpected or sudden excessive price increases in the carbon market can negatively affect market predictability, which is essential for the planning of decarbonisation investments. Therefore, the measure which applies in the event of excessive price fluctuations in the market for emissions allowance trading covered under Chapters II and III of Directive 2003/87/EC should be strengthened in a careful manner to improve its reactivity to unwarranted price fluctuations. If the triggering condition based on the increase in the average allowance price is met, this rule-based safeguard measure should apply automatically, thereby resulting in a release of a predetermined number of allowances from the market stability reserve established by Decision (EU) 2015/1814 of the European Parliament and of the Council⁽²⁶⁾. The triggering condition should be closely monitored by the Commission and published on a monthly basis in order to improve transparency. To ensure the orderly auctioning of the allowances released from the market stability reserve pursuant to this safeguard measure and to improve market predictability, this measure should not apply again until at least twelve months after the end of the previous release of allowances in the market under the measure.
- (75) The communication of the Commission of 17 September 2020 entitled 'Stepping up Europe's 2030 climate ambition - Investing in a climate-neutral future for the benefit of our people' underlined the particular challenge of reducing the emissions in the buildings and road transport sectors. Therefore, the Commission announced that a further expansion of emissions trading could include emissions from buildings and road transport, while indicating that covering all emissions from fuel combustion would present important benefits. Emissions trading should be applied to fuels used for combustion in the buildings and road transport sectors as well as in additional sectors which correspond to industrial activities not covered by Annex I to Directive 2003/87/EC such as the heating of industrial facilities ('buildings, road transport and additional sectors'). For those sectors, a separate but parallel emissions trading system should be established to avoid any disturbance of the well-functioning emissions trading system for stationary installations and aviation. The new system is accompanied by complementary policies shaping expectations of market participants and aiming for a carbon price signal for the whole economy while providing measures to avoid undue price impacts. Previous experience has shown that the development of the new system requires setting up an efficient monitoring, reporting and verification system. With a view to ensuring synergies and consistency with the existing Union infrastructure for the EU ETS, it is appropriate to set up an emissions trading system for the buildings, road transport and additional sectors via an amendment to Directive 2003/87/EC.
- (76) In order to establish the necessary implementation framework and to provide a reasonable timeframe for reaching the 2030 target, emissions trading in the buildings, road transport and additional sectors should start in 2025. During the first years, the regulated entities should be required to hold a greenhouse gas emissions permit and to report their emissions for the years 2024 to 2026. The issuance of allowances and compliance obligations for those entities should be applicable as from 2027. This sequencing would allow emissions trading in those sectors to start in an orderly and efficient manner. It would also allow the measures to be in place to ensure a socially fair introduction of emissions trading into the buildings, road transport and additional sectors, so as to mitigate the impact of the carbon price on vulnerable households and transport users.
- (77) Due to the very large number of small emitters in the buildings, road transport and additional sectors, it is not possible to establish the point of regulation at the level of entities directly emitting greenhouse gases, as is the case for stationary installations and aviation. Therefore, for reasons of technical feasibility and administrative efficiency, it is more appropriate to establish the point of regulation further upstream in the supply chain. The act that triggers the compliance obligation under the new emissions trading system should be the release for consumption of fuels which are used for combustion in the buildings and road transport sectors, including for road transport of

⁽²⁶⁾ 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).

greenhouse gases for the purpose of their geological storage, as well as in the additional sectors which correspond to industrial activities not covered by Annex I to Directive 2003/87/EC. To avoid double coverage, the release for consumption of fuels which are used in activities under Annex I to that Directive should not be covered.

- (78) The regulated entities in the buildings, road transport and additional sectors and the point of regulation should be defined in line with the system of excise duty established by Council Directive (EU) 2020/262 (²⁷), with the necessary adaptations, as that Directive already lays down a robust control system for all quantities of fuels released for consumption for the purposes of paying excise duties. Final consumers of fuels in those sectors should not be subject to obligations under Directive 2003/87/EC.
- (79) The regulated entities falling within the scope of the emissions trading system in the buildings, road transport and additional sectors should be subject to similar greenhouse gas emissions permit requirements as the operators of stationary installations. It is necessary to establish rules on permit applications, conditions for permit issuance, content, and review, and any changes related to the regulated entity. In order for the new system to start in an orderly manner, Member States should ensure that regulated entities falling within the scope of the new emissions trading system have a valid permit as of the start of the system in 2025.
- (80) The total quantity of allowances for the new emissions trading system should follow a linear trajectory to reach the emission reduction target for 2030, taking into account the cost-efficient contribution of the buildings and road transport sectors of 43 % emission reductions by 2030 compared to 2005 and of the additional sectors, a combined cost-efficient contribution of 42 % emission reductions by 2030 compared to 2005. The total quantity of allowances should be established for the first time in 2027, to follow a trajectory starting in 2024 from the value of the 2024 emissions limits, calculated in accordance with Article 4(2) of Regulation (EU) 2018/842 of the European Parliament and of the Council (²⁸) on the basis of the reference emissions for the sectors covered for 2005 and the period from 2016 to 2018 as determined under Article 4(3) of that Regulation. Accordingly, the linear reduction factor should be set at 5,10 %. From 2028, the total quantity of allowances should be set on the basis of the average reported emissions for the years 2024, 2025 and 2026, and should decrease by the same absolute annual reduction rate as set from 2024, which corresponds to a 5,38 % linear reduction factor compared to the comparable 2025 value of the above defined trajectory. If those emissions are significantly higher than that trajectory value and if such divergence is not due to small-scale differences in emission measurement methodologies, the linear reduction factor should be adjusted to reach the required level of emission reduction in 2030.
- (81) The auctioning of allowances is the simplest and the most economically efficient method for allocating emission allowances, and also avoids windfall profits. Both the buildings and road transport sectors are under relatively little or non-existent competitive pressure from outside the Union and are not exposed to a risk of carbon leakage. Therefore, allowances for buildings and road transport should only be allocated via auctioning, without there being any free allocation.
- (82) In order to ensure a smooth start to the new emissions trading system and taking into account the need of the regulated entities to hedge or buy ahead allowances to mitigate their price and liquidity risk, a higher amount of allowances should be auctioned early on. In 2027, the auction volumes should therefore be 30 % higher than the total quantity of allowances for 2027. This amount would be sufficient to provide liquidity, both if emissions decrease in line with the reductions needed, and in the event that emission reductions only materialise progressively. The detailed rules for that front-loading of auction volumes should be established in a delegated act related to auctioning, adopted pursuant to Article 10(4) of Directive 2003/87/EC.

(²⁷) Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (OJ L 58, 27.2.2020, p. 4).

(²⁸) Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

- (83) The distribution rules on auction shares are highly relevant for any auction revenues that would accrue to the Member States, especially in view of the need to strengthen the ability of the Member States to address the social impacts of a carbon price signal in the buildings and road transport sectors. Notwithstanding the fact that those buildings, road transport and additional sectors have very different characteristics, it is appropriate to set a common distribution rule similar to the one applicable to stationary installations. The majority of the allowances should be distributed among all Member States on the basis of the average distribution of the emissions in road transportation, commercial and institutional buildings and residential buildings, during the period from 2016 to 2018.
- (84) The introduction of the carbon price in the buildings and road transport sectors should be accompanied by effective social compensation, especially in view of the existing levels of energy poverty. About 34 million Europeans, nearly 6,9 % of the Union population, have said that they cannot afford to heat their home sufficiently in a 2021 Union-wide survey. To achieve effective social and distributional compensation, Member States should be required to spend the auction revenues from emissions trading for the buildings, road transport and additional sectors on the climate and energy-related purposes already specified for the existing emissions trading system, giving priority to activities that can contribute to addressing social aspects of the emissions trading in the buildings, road transport and additional sectors, or for measures added specifically to address related concerns for those sectors, including related policy measures under Directive 2012/27/EU.

A new Social Climate Fund established by Regulation (EU) 2023/955 of the European Parliament and of the Council (⁽²⁹⁾) will provide dedicated funding to Member States to support the most affected vulnerable groups, especially households in energy or transport poverty. The Social Climate Fund will promote fairness and solidarity between and within Member States while mitigating the risk of energy and transport poverty during the transition. It will build on and complement existing solidarity mechanisms, in synergy with other Union spending programmes and funds. 50 million allowances from the EU ETS pursuant to Article 10a(8b) of Directive 2003/87/EC and 150 million allowances from emissions trading in the buildings, road transport and additional sectors, and revenue generated from the auctioning of allowances concerning the buildings, road transport and additional sectors, up to a maximum of EUR 65 000 000 000, should be used for the financing of the Social Climate Fund in the form of external assigned revenue on a temporary and exceptional basis, pending the discussions and deliberations on the Commission's proposal of 22 December 2021 for a Council Decision amending Decision (EU, Euratom) 2020/2053 on the system of own resources of the European Union concerning the establishment of a new own resource based on the EU ETS in accordance with Article 311, third paragraph, TFEU.

It is necessary to provide that, where a decision is adopted in accordance with Article 311, third paragraph, TFEU establishing that new own resource, the same revenue should cease to be externally assigned when such a decision enters into force. With regard to the Social Climate Fund, the Commission is, in the event of the adoption of such a decision, to present, as appropriate, the necessary proposals in accordance with Article 27(4) of Regulation (EU) 2023/955. This is without prejudice to the outcome of the post-2027 Multiannual Financial Framework negotiations.

- (85) Reporting on the use of auctioning revenues should be aligned with the current reporting established by Regulation (EU) 2018/1999.
- (86) Regulated entities covered by the new emissions trading system should surrender allowances for their verified emissions corresponding to the quantities of fuels they have released for consumption. They should surrender allowances for the first time for their verified emissions in 2027. In order to minimise the administrative burden, a number of rules applicable to the existing emissions trading system for stationary installations and aviation should be made applicable to the new emissions trading system for the buildings, road transport and additional sectors, with the necessary adaptations. This includes, in particular, rules on transfer, surrender and cancellation of allowances, as well as the rules on the validity of allowances, penalties, competent authorities and reporting obligations of Member States.

⁽²⁹⁾ Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060 (see page 1 of this Official Journal).

- (87) Certain Member States already have national carbon taxes that apply to the buildings, road transport and additional sectors covered by Annex III to Directive 2003/87/EC. Therefore, a temporary derogation should be introduced until the end of 2030. To ensure the objectives of Directive 2003/87/EC are achieved and that the new emissions trading system is coherent, the option of applying that derogation should only be available where the national tax rate is higher than the average auctioning price for the relevant year, and should only apply to the surrender obligation of the regulated entities paying such a tax. To ensure stability and transparency of the system, the national tax, including the relevant tax rates, should be notified to the Commission by the end of the transposition period of this Directive. The derogation should not affect the external assigned revenue for the Social Climate Fund or, if established in accordance with Article 311, third paragraph, TFEU, an own resource based on the auctioning revenues from emissions trading in the buildings, road transport and additional sectors.
- (88) For emissions trading in the buildings, road transport and additional sectors to be effective, it should be possible to monitor emissions with high certainty and at reasonable cost. Emissions should be attributed to regulated entities on the basis of fuel quantities released for consumption and combined with an emission factor. Regulated entities should be able to reliably and accurately identify and differentiate the sectors in which the fuels are released for consumption, as well as the final users of the fuels, in order to avoid undesirable effects, such as a double burden. In the small number of cases where double counting between emissions in the existing EU ETS and the new emissions trading system for the buildings, road transport and additional sectors cannot be avoided, or where costs arise due to the surrender of allowances for emissions from activities not covered by Directive 2003/87/EC, Member States should use such revenue to compensate for the unavoidable double counting or other such costs outside the buildings, road transport and additional sectors in accordance with Union law. Implementing powers should therefore be conferred on the Commission to ensure uniform conditions for avoiding double counting and allowances being surrendered for emissions not covered by the emissions trading system for buildings, road transport and additional sectors, and for providing financial compensation. To further mitigate any issues of double counting, the deadlines for monitoring and surrendering in the new emissions trading system should be one month after the deadlines in the existing system for stationary installations and aviation. To have sufficient data to establish the total quantity of allowances for the period from 2028 to 2030, the regulated entities holding a permit at the start of the system in 2025 should report their associated historical emissions for 2024.
- (89) Transparency as regards carbon costs and the extent to which they are passed on to consumers is of key importance for enabling swift and cost-efficient emission reductions in all sectors of the economy. This is of particular importance in an emissions trading system which is based on upstream obligations. The new emissions trading system is meant to incentivise regulated entities to reduce the carbon content of the fuels, and such entities should not make undue profits by passing on more carbon costs to consumers than they incur. While full auctioning of emissions allowances under the emissions trading system for the buildings, road transport and additional sectors already limits the occurrence of such undue profits, the Commission should monitor the extent to which regulated entities pass on carbon costs, so that windfall profits are avoided. In relation to Chapter IVa, the Commission should report annually, where possible by type of fuel, on the average level of the carbon costs which have been passed on to consumers in the Union.
- (90) It is appropriate to introduce measures to address the potential risk of excessive price increases, which, if particularly high at the start of the new emissions trading system, may undermine the readiness of households and individuals to invest in reducing their greenhouse gas emissions. Those measures should complement the safeguards provided by the market stability reserve and that became operational in 2019. While the market will continue to determine the carbon price, safeguard measures will be triggered by a rules-based automatic mechanism, whereby allowances will be released from the market stability reserve only if one or more concrete triggering conditions based on the increase in the average allowance price are met. This additional mechanism should also be highly reactive, in order to address excessive volatility due to factors other than changed market fundamentals. The measures should be adapted to different levels of excessive price increase, which will result in different degrees of intervention. The triggering conditions should be closely monitored by the Commission and the measures should be adopted by the Commission as a matter of urgency when those conditions are met. This should be without prejudice to any accompanying measures that Member States might adopt to address adverse social impacts.

- (91) In order to increase certainty for citizens that the carbon price in the initial years of the new emissions trading system does not go above EUR 45, it is appropriate to include an additional price stability mechanism to release allowances from the market stability reserve in the event the carbon price exceeds that level. In principle, the measure should apply once during a period of 12 months. However, it should also be able to apply again during the same period of 12 months where the Commission, assisted by the Climate Change Committee, considers that the evolution of the price justifies another release of allowances. In view of the aim of this mechanism to ensure stability in the initial years of the new emissions trading system, the Commission should assess its functioning and whether it should be continued after 2029.
- (92) As an additional safeguard mechanism ahead of the start of emissions trading in the buildings, road transport and additional sectors, it should be possible to delay the application of the cap and the surrendering obligations where gas or oil wholesale prices are exceptionally high compared to historical trends. The mechanism should be automatic, meaning that the application of the cap and the surrendering obligations is to be delayed by one year if concrete energy price triggers are met. The reference prices should be determined on the basis of benchmark contracts in the gas and oil wholesale markets which are immediately available and the most relevant for final consumers. Separate trigger conditions for gas and oil prices should be envisaged, as their price developments follow different historical trends. In order to ensure market certainty, the Commission should provide clarity on the application of the delay sufficiently in advance, through a notice in the *Official Journal of the European Union*.
- (93) The application of emissions trading in the buildings, road transport and additional sectors should be monitored by the Commission, including the degree of price convergence with the existing EU ETS, and, if necessary, a review should be proposed to the European Parliament and to the Council to improve the effectiveness, administration and practical application of emissions trading for those sectors on the basis of acquired knowledge as well as increased price convergence. The Commission should be required to submit the first report on those matters by 1 January 2028.
- (94) In order to ensure uniform conditions for the implementation of Article 3ga(2), Article 3gf(2) and (4), Article 10b(4), Article 12(3-d) and (3-c), Article 14(1), Article 30f(3) and (5) and Article 30h(7) of Directive 2003/87/EC, implementing powers should be conferred on the Commission. To ensure synergies with the existing regulatory framework, the conferral of implementing powers in Articles 14 and 15 of that Directive should be extended to cover the buildings, road transport and additional sectors. Those implementing powers, except the implementing powers in relation to Article 3gf(2) and Article 12(3-d) and (3-c) of Directive 2003/87/EC, should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council ⁽³⁹⁾.
- (95) In order to achieve the objectives laid down in this Directive and other Union legislation, particularly those in Regulation (EU) 2021/1119, the Union and its Member States should make use of the latest scientific evidence while implementing policies. Therefore, when the European Scientific Advisory Board on Climate Change provides scientific advice and issues reports regarding the EU ETS, the Commission should take such advice and reports into account, in particular, as regards the need for additional Union policies and measures to ensure compliance with the objectives and targets of Regulation (EU) 2021/1119, and additional Union policies and measures in view of the ambition and environmental integrity of global market-based measures for aviation and maritime transport.
- (96) To acknowledge the contribution of EU ETS revenues to the climate transition, an EU ETS label should be introduced. Among other measures to ensure the visibility of funding from the EU ETS, Member States and the Commission should ensure that projects and activities supported through the Modernisation Fund and the Innovation Fund are clearly indicated as coming from EU ETS revenues by displaying an appropriate label.

⁽³⁹⁾ 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, p. 13).

- (97) With a view to achieving the climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119, a Union-wide climate target for 2040 should be set, based on a legislative proposal to amend that Regulation. The EU ETS should be reviewed to align it with the Union 2040 climate target. As a result, by July 2026 the Commission should report on several aspects of the EU ETS to the European Parliament and to the Council, accompanying the report, where appropriate, by a legislative proposal and impact assessment. In line with Regulation (EU) 2021/1119, priority should be given to direct emission reductions, which will have to be complemented by increased carbon removals in order to achieve climate neutrality. Therefore, among other aspects, by July 2026 the Commission should report to the European Parliament and to the Council on how emissions removed from the atmosphere and safely and permanently stored, for example through direct air capture, could potentially be covered by emissions trading, without offsetting necessary emission reductions. Until all stages of the life of a product in which captured carbon is used are subject to carbon pricing, in particular at the stage of waste incineration, reliance on accounting for emissions at the point of their release from products into the atmosphere would result in emissions being undercounted.

In order to regulate the capture of carbon in a way that reduces net emissions and ensures that all emissions are accounted for and that double counting is avoided, while generating economic incentives, the Commission should assess, by July 2026, whether all greenhouse gas emissions covered by Directive 2003/87/EC are effectively accounted for, and whether double counting is effectively avoided. In particular, it should assess the accounting for the greenhouse gas emissions which are considered to have been captured and utilised in a product in a way other than that referred to in Article 12(3b), and take into account the downstream stages, including disposal and waste incineration. Finally, the Commission should also report to the European Parliament and to the Council on the feasibility of lowering the 20 MW total rated thermal input thresholds for the activities in Annex I to Directive 2003/87/EC, taking into account the environmental benefits and administrative burden.

- (98) By July 2026, the Commission should also assess and report to the European Parliament and to the Council on the feasibility of including municipal waste incineration installations in the EU ETS, including with a view to their inclusion from 2028, and provide an assessment of the potential need for an option for a Member State to opt out until the end of 2030, taking into account the importance of all sectors contributing to emission reductions. Inclusion of municipal waste incineration installations in the EU ETS would contribute to the circular economy by encouraging recycling, reuse and repair of products, while also contributing to economy-wide decarbonisation. The inclusion of municipal waste incineration installations would reinforce incentives for sustainable management of waste in line with the waste hierarchy and would create a level playing field between the regions that have included municipal waste incineration under the scope of the EU ETS.

To avoid diversion of waste from municipal waste incineration installations towards landfills in the Union, which create methane emissions, and to avoid exports of waste to third countries, with a potentially negative impact on the environment, in its report the Commission should take into account the potential diversion of waste towards disposal by landfilling in the Union and waste exports to third countries. The Commission should also take into account the effects on the internal market, potential distortions of competition, environmental integrity, alignment with the objectives of Directive 2008/98/EC of the European Parliament and of the Council⁽³¹⁾ and robustness and accuracy with respect to the monitoring and calculation of emissions. Considering the methane emissions from landfilling and to avoid creating an uneven playing field, the Commission should also assess the possibility of including other waste management processes, such as landfilling, fermentation, composting and mechanical-biological treatment, in the EU ETS, when assessing the feasibility of including municipal waste incineration installations.

- (99) 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 the timing, administration and other aspects of auctioning, the rules on the application of conditionalities, the rules on the operation of the Innovation Fund, the rules on the operation of the competitive bidding mechanism in relation to CDs and CCDs, the requirements for considering that greenhouse gases have become permanently chemically bound in a product and the extension of the activity referred to in Annex III to Directive 2003/87/EC to other sectors. Moreover, to ensure synergies with the existing regulatory framework, the delegation in Article 10(4) of Directive 2003/87/EC concerning the timing, administration and other aspects of

⁽³¹⁾ 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).

auctioning should be extended to cover the buildings, road transport and additional sectors. 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.

(100) The provisions relating to the existing EU ETS and its extension to maritime transport should apply from 2024 in line with the need for urgent climate action and for all sectors to contribute to emission reductions in a cost-effective manner. Consequently, Member States should transpose the provisions relating to those sectors by 31 December 2023. However, the deadline for transposing the provisions relating to the emissions trading system for the buildings, road transport and additional sectors should be 30 June 2024, as the rules on monitoring, reporting, verification and permitting for those sectors apply from 1 January 2025, and require sufficient time for orderly implementation. As an exception, to guarantee transparency and robust reporting, Member States should transpose the obligation to report on historical emissions for those sectors by 31 December 2023, as that obligation relates to the emissions in the year 2024. 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.

(101) A well-functioning, reformed EU ETS comprising an instrument to stabilise the market is a key means for the Union to achieve the economy-wide net greenhouse gas emission reduction target for 2030, the Union's climate-neutrality objective by 2050 at the latest, and the aim of achieving negative emissions thereafter as laid down in Regulation (EU) 2021/1119, as well as the objectives of the Paris Agreement. The market stability reserve seeks to address the imbalance between supply and demand of allowances in the market. Article 3 of Decision (EU) 2015/1814 provides that the reserve is to be reviewed three years after it becomes operational, paying particular attention to the percentage figure for the determination of the number of allowances to be placed in the market stability reserve, the threshold for the total number of allowances in circulation (TNAC) that determines the intake of allowances, and the number of allowances to be released from the reserve. The current threshold determining the placing of allowances in the market stability reserve was established in 2018, with the last review of the EU ETS, while the linear reduction factor is being increased with this Directive. Therefore, as part of the regular review of the functioning of the market stability reserve, the Commission should also assess the need for a potential adjustment of that threshold, in line with the linear factor referred to in Article 9 of Directive 2003/87/EC.

(102) Considering the need to deliver a stronger investment signal to reduce emissions in a cost-efficient manner and with a view to strengthening the EU ETS, Decision (EU) 2015/1814 should be amended so as to increase the percentage rate for determining the number of allowances to be placed each year in the market stability reserve. In addition, for lower levels of the TNAC, the intake should be equal to the difference between the TNAC and the threshold that determines the intake of allowances. This would prevent the considerable uncertainty in the auction volumes that results when the TNAC is close to the threshold, and at the same time ensure that the surplus reaches the volume bandwidth within which the carbon market is deemed to operate in a balanced manner.

(103) Furthermore, in order to ensure that the level of allowances that remains in the market stability reserve after the invalidation is predictable, the invalidation of allowances in the reserve should no longer depend on the auction volumes of the previous year. The number of allowances in the reserve should, therefore, be fixed at a level of 400 million allowances, which corresponds to the lower threshold for the value of the TNAC.

⁽³²⁾ OJ L 123, 12.5.2016, p. 1.

⁽³³⁾ OJ C 369, 17.12.2011, p. 14.

- (104) The analysis of the impact assessment accompanying the proposal for this Directive has also shown that net demand from aviation should be included in the TNAC. In addition, since aviation allowances can be used in the same way as general allowances, including aviation in the reserve would make it a more accurate, and thus a better, tool to ensure the stability of the market. The calculation of the TNAC should include aviation emissions and allowances issued in respect of aviation as of the year following the entry into force of this Directive.
- (105) To clarify the calculation of the TNAC, Decision (EU) 2015/1814 should specify that only allowances issued and not put in the market stability reserve are included in the supply of allowances. Moreover, the formula should no longer subtract the number of allowances in the market stability reserve from the supply of allowances. This change would have no material impact on the result of the calculation of the TNAC, including on the past calculations of the TNAC or on the reserve.
- (106) In order to mitigate the risk of supply and demand imbalances associated with the start of emissions trading for the buildings, road transport and additional sectors, as well as to render it more resistant to market shocks, the rule-based mechanism of the market stability reserve should be applied to those sectors. For that reserve to be operational from the start of the system, it should be established with an initial endowment of 600 million allowances for emissions trading in the buildings, road transport and additional sectors. The initial lower and upper thresholds, which trigger the release or intake of allowances from the reserve, should be subject to a general review clause. Other elements such as the publication of the TNAC or the quantity of allowances released or placed in the reserve should follow the rules of the reserve for other sectors.
- (107) 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 2030 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.
- (108) Directive 2003/87/EC and Decision (EU) 2015/1814 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:

- (1) in Article 1, the second paragraph is replaced by the following:

This Directive also provides for the reductions of greenhouse gas emissions to be increased so as to contribute to the levels of reductions that are considered scientifically necessary to avoid dangerous climate change. It contributes to the achievement of the Union's climate-neutrality objective and its climate targets as laid down in Regulation (EU) 2021/1119 of the European Parliament and of the Council (*) and thereby to the objectives of the Paris Agreement (**).

(*) 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).

(**) OJ L 282, 19.10.2016, p. 4.';

(2) in Article 2, paragraphs 1 and 2 are 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 next five-year period 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 or also of the next five-year period, 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. This Directive shall apply without prejudice to any requirements pursuant to Directive 2010/75/EU of the European Parliament and of the Council (*).

(*). Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17);

(3) Article 3 is amended as follows:

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

‘(b) “emissions” means the release of greenhouse gases from sources in an installation or the release from an aircraft performing an aviation activity listed in Annex I or from ships performing a maritime transport activity listed in Annex I of the gases specified in respect of that activity, or the release of greenhouse gases corresponding to the activity referred to in Annex III;’;

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

‘(d) “greenhouse gas emissions permit” means the permit issued in accordance with Articles 5, 6 and 30b;’;

(c) point (u) is deleted;

(d) the following points are added:

‘(w) “shipping company” means the shipowner or any other organisation or person, such as the manager or the bareboat charterer, that has assumed the responsibility for the operation of the ship from the shipowner and that, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention, set out in Annex I to Regulation (EC) No 336/2006 of the European Parliament and of the Council (*);’;

(x) “voyage” means a voyage as defined in Article 3, point (c), of Regulation (EU) 2015/757 of the European Parliament and of the Council (**);

(y) “administering authority in respect of a shipping company” means the authority responsible for administering the EU ETS in respect of a shipping company in accordance with Article 3gf;

(z) “port of call” means the port where a ship stops to load or unload cargo or to embark or disembark passengers, or the port where an offshore ship stops to relieve the crew; stops for the sole purposes of refuelling, obtaining supplies, relieving the crew of a ship other than an offshore 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;

- (aa) "cruise passenger ship" means a passenger ship that has no cargo deck and is designed exclusively for commercial transportation of passengers in overnight accommodation on a sea voyage;
- (ab) "contract for difference" or "CD" means a contract between the Commission and the producer, selected through a competitive bidding mechanism such as an auction, of a low- or zero-carbon product, and under which the producer is provided with support from the Innovation Fund covering the difference between the winning price, also known as the strike price, on the one hand, and a reference price derived from the price of the low- or zero-carbon product produced, the market price of a close substitute, or a combination of those two prices, on the other hand;
- (ac) "carbon contract for difference" or "CCD" means a contract between the Commission and the producer, selected through a competitive bidding mechanism such as an auction, of a low- or zero-carbon product, and under which the producer is provided with support from the Innovation Fund covering the difference between the winning price, also known as the strike price, on the one hand, and a reference price derived from the average price of allowances, on the other hand;
- (ad) "fixed premium contract" means a contract between the Commission and the producer, selected through a competitive bidding mechanism such as an auction, of a low- or zero-carbon product, and under which the producer is provided with support in the form of a fixed amount per unit of the product produced;
- (ae) "regulated entity" for the purposes of Chapter IVa means any natural or legal person, except for any final consumer of the fuels, that engages in the activity referred to in Annex III and that falls within one of the following categories:
 - (i) where the fuel passes through a tax warehouse as defined in Article 3, point (11), of Council Directive (EU) 2020/262 (**), the authorised warehousekeeper as defined in Article 3, point (1), of that Directive, liable to pay the excise duty which has become chargeable pursuant to Article 7 of that Directive;
 - (ii) if point (i) of this point is not applicable, any other person liable to pay the excise duty which has become chargeable pursuant to Article 7 of Directive (EU) 2020/262 or Article 21(5), first subparagraph, of Council Directive 2003/96/EC (****) in respect of the fuels covered by Chapter IVa of this Directive;
 - (iii) if points (i) and (ii) of this point are not applicable, any other person that has to be registered by the relevant competent authorities of the Member State for the purpose of being liable to pay the excise duty, including any person exempt from paying the excise duty, as referred to in Article 21(5), fourth subparagraph, of Directive 2003/96/EC;
 - (iv) if points (i), (ii) and (iii) are not applicable, or if several persons are jointly and severally liable for payment of the same excise duty, any other person designated by a Member State;
- (af) "fuel" for the purposes of Chapter IVa of this Directive means any energy product referred to in Article 2(1) of Directive 2003/96/EC, including the fuels listed in Table A and Table C of Annex I to that Directive, as well as any other product intended for use, offered for sale or used as motor fuel or heating fuel as specified in Article 2(3) of that Directive, including for the production of electricity;
- (ag) "release for consumption" for the purposes of Chapter IVa of this Directive means release for consumption as defined in Article 6(3) of Directive (EU) 2020/262;
- (ah) "TTF gas price" for the purposes of Chapter IVa means the price of the gas futures month-ahead contract traded at the Title Transfer Facility (TTF) Virtual Trading Point, operated by Gasunie Transport Services B.V.;

- (ai) “Brent crude oil price” for the purposes of Chapter IVa means the futures month-ahead price for crude oil, used as a benchmark price for the purchase of oil.

- (*) Regulation (EC) No 336/2006 of the European Parliament and of the Council of 15 February 2006 on the implementation of the International Safety Management Code within the Community and repealing Council Regulation (EC) No 3051/95 (OJ L 64, 4.3.2006, p. 1).
- (**) 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).
- (***) Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (OJ L 58, 27.2.2020, p. 4).
- (****) Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity (OJ L 283, 31.10.2003, p. 51).;

- (4) the title of Chapter II is replaced by the following:

‘Aviation and Maritime Transport’;

- (5) Article 3a is replaced by the following:

‘Article 3a

Scope

Articles 3b to 3g shall apply to the allocation and issue of allowances in respect of the aviation activities listed in Annex I. Articles 3ga to 3gg shall apply in respect of the maritime transport activities listed in Annex I.’;

- (6) Article 3g is replaced by the following:

‘Article 3g

Monitoring and reporting plans

The administering Member State shall ensure that each aircraft operator submits to the competent authority in that Member State a monitoring plan setting out measures to monitor and report emissions and that such plans are approved by the competent authority in accordance with the implementing acts referred to in Article 14.’;

- (7) the following Articles are inserted:

‘Article 3ga

Scope of application to maritime transport activities

1. 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.

2. The Commission shall, by 31 December 2023, by means of implementing acts establish a list of neighbouring container transhipment ports and update that list by 31 December every two years thereafter.

Those implementing acts shall list a port as a neighbouring container transhipment port where the share of transhipment of containers, measured in twenty-foot equivalent units, exceeds 65 % 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.

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

3. Articles 9, 9a and 10 shall apply to maritime transport activities in the same manner as they apply to other activities covered by the EU ETS with the following exception with regard to the application of Article 10.

Until 31 December 2030, a share of allowances shall be attributed to Member States with a ratio of shipping companies that would have been under their responsibility pursuant to Article 3gf compared to their respective population in 2020 and based on data available for the period from 2018 to 2020, above 15 shipping companies per million inhabitants. The quantity of allowances shall correspond to 3,5 % of the additional quantity of allowances due to the increase in the cap for maritime transport referred to in Article 9, third paragraph, in the relevant year. For the years 2024 and 2025, the quantity of allowances shall in addition be multiplied by the percentages applicable to the relevant year pursuant to Article 3gb, first paragraph, points (a) and (b). The revenue generated from the auctioning of that share of allowances should be used for the purposes referred to in Article 10(3), first subparagraph, point (g), with regard to the maritime sector, and points (f) and (i). 50 % of the quantity of allowances shall be distributed among the relevant Member States based on the share of shipping companies under their responsibility and the remainder distributed in equal shares between them.

Article 3gb

Phase-in of requirements for maritime transport

Shipping companies shall be liable to surrender allowances according to the following schedule:

- (a) 40 % of verified emissions reported for 2024 that would be subject to surrender requirements in accordance with Article 12;
- (b) 70 % of verified emissions reported for 2025 that would be subject to surrender requirements in accordance with Article 12;
- (c) 100 % of verified emissions reported for 2026 and each year thereafter in accordance with Article 12.

Where fewer allowances are surrendered compared to the verified emissions from maritime transport for the years 2024 and 2025, 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.

Article 3gc

Provisions for transfer of the costs of the EU ETS from the shipping company to another entity

Member States shall take the necessary measures to ensure that when the ultimate responsibility for the purchase of the fuel, or the operation of the ship, or both, is assumed by an entity other than the shipping company pursuant to a contractual arrangement, the shipping company is entitled to reimbursement from that entity for the costs arising from the surrender of allowances.

'Operation of the ship' for the purposes of this Article means determining the cargo carried or the route and the speed of the ship. The shipping company shall remain the entity responsible for surrendering allowances as required under Articles 3gb and 12 and for overall compliance with the provisions of national law transposing this Directive. Member States shall ensure that shipping companies under their responsibility comply with the obligations to surrender allowances under Articles 3gb and 12, notwithstanding the entitlement of such shipping companies to be reimbursed by the commercial operators for the costs arising from the surrender.

Article 3gd**Monitoring and reporting of emissions from maritime transport**

In respect of emissions from maritime transport activities listed in Annex I to this Directive, the administering authority in respect of a shipping company shall ensure that a shipping company under its responsibility monitors and reports the relevant parameters during a reporting period, and submits to it aggregated emissions data at company level in accordance with Chapter II of Regulation (EU) 2015/757.

Article 3ge**Verification and accreditation rules for emissions from maritime transport**

The administering authority in respect of a shipping company shall ensure that the reporting of aggregated emissions data at shipping company level submitted by a shipping company pursuant to Article 3gd of this Directive is verified in accordance with the verification and accreditation rules set out in Chapter III of Regulation (EU) 2015/757.

Article 3gf**Administering authority in respect of a shipping company**

1. The administering authority in respect of a shipping company shall be:
 - (a) in the case of a shipping company registered in a Member State, the Member State in which the shipping company is registered;
 - (b) in the case of a shipping company that is not registered in a Member State, the Member State with the greatest estimated number of port calls from voyages performed by that shipping company in the preceding four monitoring years and falling within the scope set out in Article 3ga;
 - (c) in the case of a shipping company that is not registered in a Member State and that did not carry out any voyage falling within the scope set out in Article 3ga in the preceding four monitoring years, the Member State where a ship of the shipping company has started or ended its first voyage falling within the scope set out in that Article.
2. Based on the best available information, the Commission shall establish by means of implementing acts:
 - (a) before 1 February 2024, a list of shipping companies which performed a maritime transport activity listed in Annex I that fell within the scope set out in Article 3ga on or with effect from 1 January 2024, specifying the administering authority in respect of a shipping company in accordance with paragraph 1 of this Article;
 - (b) before 1 February 2026 and every two years thereafter, an updated list to reattribute shipping companies registered in a Member State to another administering authority in respect of a shipping company if they changed the Member State of registration within the Union in accordance with paragraph 1, point (a), of this Article or to include shipping companies which have subsequently performed a maritime transport activity listed in Annex I that fell within the scope set out in Article 3ga, in accordance with paragraph 1, point (c), of this Article; and
 - (c) before 1 February 2028 and every four years thereafter, an updated list to reattribute shipping companies that are not registered in a Member State to another administering authority in respect of a shipping company in accordance with paragraph 1, point (b), of this Article.
3. An administering authority in respect of a shipping company that, according to the list established pursuant to paragraph 2, is responsible for a shipping company shall retain that responsibility regardless of subsequent changes in the shipping company's activities or registration until those changes are reflected in an updated list.
4. The Commission shall adopt implementing acts to establish detailed rules relating to the administration of shipping companies by administering authorities in respect of a shipping company under this Directive. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

Article 3gg

Reporting and review

1. In the event of the adoption by the International Maritime Organization (IMO) of a global market-based measure to reduce greenhouse gas emissions from maritime transport, the Commission shall review this Directive in light of that adopted measure.

To that end, the Commission shall submit a report to the European Parliament and to the Council within 18 months of the adoption of such a global market-based measure and before it becomes operational. In that report, the Commission shall examine the global market-based measure as regards:

- (a) its ambition in light of the objectives of the Paris Agreement;
- (b) its overall environmental integrity, including in comparison with the provisions of this Directive covering maritime transport; and
- (c) any issue related to the coherence between the EU ETS and that measure.

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 target 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 any significant double burden.

2. In the event that the IMO does not adopt by 2028 a global market-based measure to reduce greenhouse gas emissions from maritime transport in line with the objectives of the Paris Agreement and at least to a level comparable to that resulting from the Union measures taken under this Directive, the Commission shall submit a report to the European Parliament and to the Council in which it shall examine the need to apply the allocation of allowances and surrender requirements in respect of more than fifty percent (50 %) of the emissions from ships performing 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, in light of the objectives of the Paris Agreement. In that report, the Commission shall, in particular, consider progress at IMO level and examine whether any third country has a market-based measure equivalent to this Directive and assess the risk of an increase in evasive practices, including through a shift to other modes of transport or a shift of port hubs to ports outside the Union.

Where appropriate, the report referred to in the first subparagraph shall be accompanied by a legislative proposal to amend this Directive.

3. The Commission shall monitor the implementation of this Chapter in relation to maritime transport, in particular to detect evasive behaviour in order to prevent such behaviour at an early stage, including giving consideration to outermost regions, and report biennially from 2024 on the implementation of this Chapter in relation to maritime transport and possible trends regarding shipping companies seeking to evade the requirements of this Directive. The Commission shall also monitor impacts regarding, inter alia, possible transport cost increases, market distortions and changes in port traffic, such as port evasion and shifts of transhipment hubs, the overall competitiveness of the maritime sector in the Member States, and in particular impacts on those shipping services that constitute essential services of territorial continuity. If appropriate, the Commission shall propose measures to ensure the effective implementation of this Chapter in relation to maritime transport, in particular measures to address trends regarding shipping companies seeking to evade the requirements of this Directive.

4. No later than 30 September 2028, the Commission shall assess the appropriateness of extending the application of Article 3ga(3), second subparagraph, beyond 31 December 2030 and, if appropriate, submit a legislative proposal to that effect.

5. No later than 31 December 2026, 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, including offshore ships, below 5 000 gross tonnage but not below 400 gross tonnage, building, in particular, on the analysis accompanying the review of Regulation (EU) 2015/757 due by 31 December 2024.

That report shall also consider the interlinkages between this Directive and Regulation (EU) 2015/757 and draw on the experience gained from the application thereof. In that report, the Commission shall also examine how this Directive can best account for the uptake of renewable and low-carbon maritime fuels on a lifecycle basis. If appropriate, the report may be accompanied by legislative proposals.';

- (8) Article 3h is replaced by the following:

'Article 3h

Scope

The provisions of this Chapter shall apply to greenhouse gas emissions permits and the allocation and issue of allowances in respect of activities listed in Annex I other than aviation activities and maritime transport activities.';

- (9) in Article 6(2), point (e) is replaced by the following:

'(e) an obligation to surrender allowances equal to the total emissions of the installation in each calendar year, as verified in accordance with Article 15, by the deadline laid down in Article 12(3).';

- (10) Article 8 is replaced by the following:

'Article 8

Coordination with Directive 2010/75/EU

Member States shall take the necessary measures to ensure that, where installations carry out activities that are included in Annex I to Directive 2010/75/EU, the conditions and procedure for the issue of a greenhouse gas emissions permit are coordinated with those for the issue of a permit provided for in that Directive. The requirements laid down in Articles 5, 6 and 7 of this Directive may be integrated into the procedures provided for in Directive 2010/75/EU.

The Commission shall review the effectiveness of synergies with Directive 2010/75/EU. Environmental and climate-relevant permits shall be coordinated to ensure efficient and speedier execution of measures needed to comply with Union climate and energy objectives. The Commission may submit a report to the European Parliament and to the Council in the context of any future review of this Directive.';

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

'In 2024, the Union-wide quantity of allowances shall be decreased by 90 million allowances. In 2026, the Union-wide quantity of allowances shall be decreased by 27 million allowances. In 2024, the Union-wide quantity of allowances shall be increased by 78,4 million allowances for maritime transport. The linear factor shall be 4,3 % from 2024 to 2027 and 4,4 % from 2028. The linear factor shall also apply to the allowances corresponding to the average emissions from maritime transport reported in accordance with Regulation (EU) 2015/757 for 2018 and 2019 that are addressed in Article 3ga of this Directive. The Commission shall publish the Union-wide quantity of allowances by 6 September 2023.

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 10a(8).';

- (12) Article 10 is amended as follows:

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

'2 % of the total quantity of allowances between 2021 and 2030 shall be auctioned to establish a fund to improve energy efficiency and modernise the energy systems of certain Member States (the 'beneficiary Member States') as set out in Article 10d (the 'Modernisation Fund'). The beneficiary Member States for that amount of allowances shall be the Member States with a GDP per capita at market prices below 60 % of the Union average in 2013. The funds corresponding to that amount of allowances shall be distributed in accordance with Part A of Annex IIb.

In addition, 2,5 % of the total quantity of allowances between 2024 and 2030 shall be auctioned for the Modernisation Fund. The beneficiary Member States for that amount of allowances shall be the Member States with a GDP per capita at market prices below 75 % of the Union average during the period from 2016 to 2018. The funds corresponding to that amount of allowances shall be distributed in accordance with Part B of Annex IIb.;

(b) in paragraph 3, first subparagraph, the introductory part 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 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, for one or more of the following':

(c) in paragraph 3, first subparagraph, points (b) to (f) are replaced by the following:

- (b) to develop renewable energies and grids for electricity transmission to meet the commitment of the Union to renewable energies and the Union targets on interconnectivity, as well as to develop other technologies that contribute to the transition to a safe and sustainable low-carbon economy, and to help to meet the commitment of the Union to increase energy efficiency, at the levels agreed in relevant legislative acts, including the production of electricity from renewables self-consumers and renewable energy communities;
- (c) 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, and measures to transfer technologies and to facilitate adaptation to the adverse effects of climate change in those countries;
- (d) forestry and soil sequestration in the Union;
- (e) the environmentally safe capture and geological storage of CO₂, in particular from solid fossil fuel power stations and a range of industrial sectors and subsectors, including in third countries, and innovative technological carbon removal methods, such as direct air capture and storage;
- (f) to invest in and accelerate the shift to forms of transport which contribute significantly to the decarbonisation of the sector, including the development of climate-friendly passenger and freight rail transport and bus services and technologies, measures to decarbonise the maritime sector, including the improvement of the energy efficiency of ships, ports, innovative technologies and infrastructure, and sustainable alternative fuels, such as hydrogen and ammonia that are produced from renewables, and zero-emission propulsion technologies, and to finance measures to support the decarbonisation of airports in accordance with a Regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU of the European Parliament and of the Council, and a Regulation of the European Parliament and of the Council on ensuring a level playing field for sustainable air transport.;

(d) in paragraph 3, first subparagraph, point (h) is replaced by the following:

- (h) measures intended to improve 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 2010/31/EU of the European Parliament and of the Council (*), starting with the renovation of the worst-performing buildings;

(*) Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (OJ L 153, 18.6.2010, p. 13).;

(e) in paragraph 3, first subparagraph, the following points are inserted:

- '(ha) to provide financial support to address social aspects in lower- and middle-income households, including by reducing distortive taxes, and targeted reductions of duties and charges for renewable electricity;
- (hb) to finance national climate dividend schemes with a proven positive environmental impact as documented in the annual report referred to in Article 19(2) of Regulation (EU) 2018/1999 of the European Parliament and of the Council (*).

(* 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).';

(f) in paragraph 3, first subparagraph, point (k) is replaced by the following:

- '(k) 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;
- (l) 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.

(* 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).';

(g) in paragraph 3, the following subparagraph is inserted after the first subparagraph:

'When determining the use of revenues generated from the auctioning of the allowances, Member States shall take into account the need to continue scaling up international climate finance in vulnerable third countries referred to in the first subparagraph, point (j).';

(h) in paragraph 3, the second subparagraph is replaced by the following:

'Member States shall be deemed to have fulfilled the provisions of this paragraph if they have in place and implement fiscal or financial support policies, including in particular in developing countries, or domestic regulatory policies, which leverage financial support, established for the purposes set out in the first subparagraph and which have a value equivalent to the revenues referred to in the first subparagraph.';

(i) in paragraph 3, the third subparagraph is replaced by the following:

'Member States shall inform the Commission as to the use of revenues and the actions taken pursuant to this paragraph in their reports submitted under Article 19(2) of Regulation (EU) 2018/1999, 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 (*).

The reporting shall be sufficiently detailed to enable the Commission to assess the Member States' compliance with the first subparagraph.

(* 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).';

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

'The Commission is empowered to adopt delegated acts in accordance with Article 23 of this Directive to supplement this Directive concerning the timing, administration and other aspects of auctioning, including modalities for auctioning which are necessary for the transfer of a share of revenues to the Union budget as external assigned revenue in accordance with Article 30d(4) of this Directive or as own resources in accordance with Article 311, third paragraph, TFEU, in order to ensure that it is conducted in an open, transparent, harmonised and non-discriminatory manner. To that end, the process shall be predictable, in particular as regards the timing and sequencing of auctions and the estimated amount of allowances to be made available.';

(k) 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 and on other relevant climate and energy policies, 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 of this Article and the information provided by Member States on the financial measures referred to in Article 10a(6). If necessary, Member States shall ensure that any relevant information is submitted to the Commission at least two months before the Commission adopts the report.';

(l) the following paragraph is added:

'6. ESMA shall regularly monitor the integrity and transparency of the European carbon market, in particular with regard to market volatility and price evolution, the operation of the auctions, trading operations on the market for emission allowances and derivatives thereof, including over-the-counter trading, liquidity and the volumes traded, and the categories and trading behaviour of market participants, including positions of financial intermediaries. ESMA shall include the relevant findings and, where necessary, make recommendations in its assessments to the European Parliament, to the Council, to the Commission and to the European Systemic Risk Board in accordance with Article 32(3) of Regulation (EU) No 1095/2010 of the European Parliament and of the Council (*). For the purposes of the tasks referred to in the first sentence of this paragraph, ESMA and the relevant competent authorities shall cooperate and exchange detailed information on all types of transactions in accordance with Article 25 of Regulation (EU) No 596/2014 of the European Parliament and of the Council (**).

(*) Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC (OJ L 331, 15.12.2010, p. 84).

(**) Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC (OJ L 173, 12.6.2014, p. 1).';

(13) Article 10a is amended as follows:

(a) paragraph 1 is amended as follows:

(i) the following subparagraphs are inserted after the second subparagraph:

'If an installation is covered by the obligation to conduct an energy audit or to implement a certified energy management system under Article 8 of Directive 2012/27/EU of the European Parliament and of the Council (*) and if the recommendations of the audit report or of the certified energy management system are not implemented, unless the pay-back time for the relevant investments exceeds three years or unless the costs of those investments are disproportionate, then the amount of free allocation shall be reduced by 20 %. The amount of free allocation shall not be reduced if an operator demonstrates that it has implemented other measures which lead to greenhouse gas emission reductions equivalent to those recommended by the audit report or by the certified energy management system for the installation concerned.'

The Commission shall supplement this Directive by providing, in the delegated acts adopted pursuant to this paragraph and without prejudice to the rules applicable under Directive 2012/27/EU, for administratively simple harmonised rules for the application of the third subparagraph of this paragraph that ensure that the application of the conditionality does not jeopardise a level playing field, environmental integrity or equal treatment between installations across the Union. Those harmonised rules shall in particular provide for timelines, for criteria for the recognition of implemented energy efficiency measures as well as for alternative measures reducing greenhouse gas emissions, using the procedure for national implementing measures in accordance with Article 11(1) of this Directive.

In addition to the requirements set out in the third subparagraph of this paragraph, the reduction by 20 % referred to in that subparagraph shall be applied where, by 1 May 2024, operators of installations whose greenhouse gas emission levels are higher than the 80th percentile of emission levels for the relevant product benchmarks have not established a climate-neutrality plan for each of those installations for its activities covered by this Directive. That plan shall contain the elements specified in Article 10b(4) and be established in accordance with the implementing acts provided for in that Article. Article 10b(4) shall be read as only referring to the installation level. The achievement of the targets and milestones referred to in Article 10b(4), third subparagraph, point (b), shall be verified in respect of the period until 31 December 2025 and in respect of each period ending 31 December of each fifth year thereafter, in accordance with the verification and accreditation procedures provided for in Article 15. No free allowances beyond 80 % shall be allocated if achievement of the intermediate targets and milestones has not been verified in respect of the period until the end of 2025 or in respect of the period from 2026 to 2030.

Allowances that are not allocated due to a reduction of free allocation in accordance with the third and fifth subparagraphs of this paragraph shall be used to exempt installations from the adjustment in accordance with paragraph 5 of this Article. Where any such allowances remain, 50 % of those allowances shall be made available to support innovation in accordance with paragraph 8 of this Article. The other 50 % of those allowances shall be auctioned in accordance with Article 10(1) of this Directive and Member States should use the respective revenues to address any residual risk of carbon leakage in the sectors covered by Annex I to Regulation (EU) 2023/956, supporting the transition and promoting their decarbonisation in accordance with State aid rules.

No free allocation shall be given to installations in sectors or subsectors to the extent they are covered by other measures to address the risk of carbon leakage as established by Regulation (EU) 2023/956. The measures referred to in the first subparagraph of this paragraph shall be adjusted accordingly.

(*) Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).;

- (ii) the third subparagraph is replaced by the following:

'For each sector and subsector, in principle, the benchmark shall be calculated for products rather than for inputs, in order to maximise greenhouse gas emission reductions and energy efficiency savings throughout each production process of the sector or the subsector concerned. In order to provide further incentives for reducing greenhouse gas emissions and improving energy efficiency and to ensure a level playing field for installations using new technologies that partly reduce or fully eliminate greenhouse gas emissions, and installations using existing technologies, the determined Union-wide ex-ante benchmarks shall be reviewed in relation to their application in the period from 2026 to 2030, with a view to potentially modifying the definitions and system boundaries of existing product benchmarks, considering as guiding principles the circular use-potential of materials and that the benchmarks should be independent of the feedstock and the type of production process, where the production processes have the same purpose. The Commission shall endeavour to adopt the implementing acts for the purpose of determining the revised benchmark values for free allocation in accordance with paragraph 2, third subparagraph, as soon as possible and before the start of the period from 2026 to 2030.'

(b) the following paragraph is inserted:

'1a. Subject to the application of Regulation (EU) 2023/956, no free allocation shall be given in relation to the production of goods listed in Annex I to that Regulation.

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 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, 90 % in 2028, 77,5 % in 2029, 51,5 % in 2030, 39 % in 2031, 26,5 % in 2032 and 14 % in 2033. From 2034, no CBAM factor shall apply.

The reduction of free allocation shall be calculated annually as the average share of the demand for free allocation for the production of goods listed in Annex I to Regulation (EU) 2023/956 compared to the calculated total free allocation demand for all installations, for the relevant period referred to in Article 11(1) of this Directive. The CBAM factor shall be applied in this calculation.

Allowances resulting from the reduction of free allocation shall be made available to support innovation in accordance with paragraph 8.

By 31 December 2024 and as part of its annual report to the European Parliament and to the Council pursuant to Article 10(5) of this Directive, the Commission shall assess the carbon leakage risk for goods subject to CBAM and produced in the Union for export to third countries which do not apply the EU ETS or a similar carbon pricing mechanism. The report shall in particular assess the carbon leakage risk in sectors to which CBAM will apply, in particular the role and accelerated uptake of hydrogen, and the developments as regards trade flows and the embedded emissions of goods produced by those sectors on the global market. Where the report concludes that there is a carbon leakage risk for goods produced in the Union for export to third countries which do not apply the EU ETS or an equivalent carbon pricing mechanism, the Commission shall, where appropriate, submit a legislative proposal to address that carbon leakage risk in a manner that is compliant with the rules of the World Trade Organization, including Article XX of the General Agreement on Tariffs and Trade 1994, and takes into account the decarbonisation of installations in the Union.'

(c) paragraph 2 is amended as follows:

(i) in the third subparagraph, point (c) is replaced by the following:

'(c) For the period from 2026 to 2030, the benchmark values shall be determined in the same manner as set out in points (a) and (d) of this subparagraph, taking into account point (e) of this subparagraph, on the basis of information submitted pursuant to Article 11 for the years 2021 and 2022 and on the basis of applying the annual reduction rate in respect of each year between 2008 and 2028.'

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

'(d) Where the annual reduction rate exceeds 2,5 % or is below 0,3 %, the benchmark values for the period from 2026 to 2030 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 2028.

(e) For the period from 2026 to 2030, the annual reduction rate for the product benchmark for hot metal shall not be affected by the change of benchmark definitions and system boundaries applicable pursuant to paragraph 1, eighth subparagraph.'

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

'By way of derogation regarding the benchmark values for aromatics and syngas, those benchmark values shall be adjusted by the same percentage as the refineries benchmarks in order to preserve a level playing field for producers of those products.'

(d) paragraphs 3 and 4 are deleted;

(e) paragraph 5 is replaced by the following:

'5. In order to respect the auctioning share set out in Article 10, for every year in which the sum of free allocations does not reach the maximum amount that respects the auctioning share, the remaining allowances up to that amount shall be used to prevent or limit reduction of free allocations to respect the auctioning share in later years. Where, nonetheless, the maximum amount is reached, free allocations shall be adjusted accordingly. Any such adjustment shall be done in a uniform manner. However, installations whose greenhouse gas emission levels are below the average of the 10 % most efficient installations in a sector or subsector in the Union for the relevant benchmarks in a year when the adjustment applies shall be exempted from that adjustment.';

(f) in paragraph 6, the first subparagraph is replaced by the following:

'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 of this Article. Where a Member State spends an amount higher than the equivalent of 25 % of the auction revenues referred to in Article 10(3) for the year in which the indirect costs were incurred, it shall set out the reasons for exceeding that amount.'

(g) in paragraph 7, the second subparagraph is replaced by the following:

'From 2021, allowances that, pursuant to paragraphs 19, 20 and 22, are not allocated to installations shall be added to the amount of allowances set aside in accordance with the first subparagraph, first sentence, of this paragraph.'

(h) paragraph 8 is replaced by the following:

'8. 345 million allowances from the quantity which could otherwise be allocated for free pursuant to this Article, and 80 million allowances from the quantity which could otherwise be auctioned pursuant to Article 10, as well as the allowances resulting from the reduction of free allocation referred to in paragraph 1a of this Article, shall be made available to a fund (the 'Innovation Fund') with the objective of supporting innovation in low- and zero-carbon techniques, processes and technologies that contribute significantly to the decarbonisation of the sectors covered by this Directive and contribute to zero pollution and circularity objectives, including projects aimed at scaling up such techniques, processes and technologies with a view to their broad roll-out across the Union. Such projects shall possess significant greenhouse gas emissions abatement potential and contribute to energy and resource savings in line with the Union's climate and energy targets for 2030.

The Commission shall frontload Innovation Fund allowances to ensure that an adequate amount of resources is available to foster innovation, including for scaling up.

Allowances that are not issued to aircraft operators due to them ceasing operations and which are not necessary to cover any shortfall in surrenders by those operators shall also be used for innovation support as referred to in the first subparagraph.

Moreover, 5 million allowances from the quantity referred to in Article 3c(5) and (7) relating to aviation allocations for 2026 shall be made available for innovation support as referred to in the first subparagraph of this paragraph.

In addition, 50 million unallocated allowances from the market stability reserve shall supplement any remaining revenues from the 300 million allowances available in the period from 2013 to 2020 under Commission Decision 2010/670/EU (*), and shall be used in a timely manner for innovation support as referred to in the first subparagraph of this paragraph.

The Innovation Fund shall cover the sectors listed in Annexes I and III, as well as products and processes substituting carbon intensive ones produced or used in sectors listed in Annex I, including innovative renewable energy and energy storage technologies and environmentally safe carbon capture and utilisation (CCU) that contributes substantially to mitigating climate change, in particular for unavoidable process emissions, and shall help stimulate the construction and operation of projects aimed at the environmentally safe capture, transport and geological storage (CCS) of CO₂, in particular for unavoidable industrial process emissions, and the direct

capture of CO₂ from the atmosphere with safe, sustainable and permanent storage (DACS), in geographically balanced locations. The Innovation Fund may also support breakthrough innovative technologies and infrastructure, including production of low- and zero-carbon fuels, to decarbonise the maritime, aviation, rail and road transport sectors, including collective forms of transport such as public transport and coach services.

For aviation, it may also support electrification and actions to reduce the overall climate impacts of aviation.

The Commission shall give special attention to projects in sectors covered by Regulation (EU) 2023/956 to support innovation in low-carbon technologies, CCU, CCS, renewable energy and energy storage, in a way that contributes to mitigating climate change with the aim of awarding, over the period from 2021 to 2030, projects in those sectors a significant share of the equivalence in financial value of the allowances referred to in paragraph 1a, fourth subparagraph, of this Article. In addition, the Commission may launch, before 2027, calls for proposals dedicated to the sectors covered by that Regulation.

The Commission shall also give special attention to projects contributing to the decarbonisation of the maritime sector and shall include topics dedicated to that purpose in the Innovation Fund calls for proposals, where appropriate, including to electrify maritime transport, and to address its full climate impact, including black carbon emissions. Such calls for proposals shall also, in the criteria used for the selection of projects, take particular account of the potential for increasing biodiversity protection and for reducing noise and water pollution from projects and investments.

The Innovation Fund may in accordance with paragraph 8a support projects through competitive bidding, such as CDs, CCDs or fixed premium contracts to support decarbonisation technologies for which the carbon price might not be a sufficient incentive.

The Commission shall seek synergies between the Innovation Fund and Horizon Europe, in particular in relation to European partnerships, and shall, where relevant, seek synergies between the Innovation Fund and other Union programmes.

Projects in the territory of all Member States, including small-scale and medium-scale projects, shall be eligible, and, for maritime activities, projects with clear added value for the Union shall be eligible. Technologies receiving support shall be innovative and not yet commercially viable at a similar scale without support, but shall represent breakthrough solutions or be sufficiently mature for application on a pre-commercial scale.

The Commission shall ensure that the allowances destined for the Innovation Fund are auctioned in accordance with the principles and modalities referred to in Article 10(4) of this Directive. Proceeds from the auctioning 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 (**). Budgetary commitments for actions extending over more than one financial year may be broken down into annual instalments over several years.

The Commission shall, on request, provide technical assistance to Member States with low effective participation in projects under the Innovation Fund for the purpose of increasing the capacities of the requesting Member State to support the efforts of project proponents in their respective territories to submit applications for funding from the Innovation Fund, in order to improve the effective geographical participation in the Innovation Fund and increase the overall quality of submitted projects. The Commission shall pursue effective, quality-based geographical coverage in relation to funding from the Innovation Fund across the Union and shall ensure comprehensive monitoring of progress and appropriate follow-up in that respect.

Subject to the agreement of applicants, following the closure of a call for proposals, the Commission shall inform Member States of the applications for funding of projects in their respective territories and shall provide them with detailed information concerning those applications in order to facilitate Member States' coordination of the support for projects. In addition, the Commission shall inform Member States about the list of pre-selected projects prior to the award of the support.

Projects shall be selected by means of a transparent selection procedure, in a technology-neutral manner in accordance with the objectives of the Innovation Fund as set out in the first subparagraph of this paragraph and on the basis of objective and transparent criteria, taking into account the extent to which projects provide a

significant contribution to the Union's climate and energy targets while contributing to the zero pollution and circularity objectives in accordance with the first subparagraph of this paragraph, and, where relevant, the extent to which projects contribute to achieving emission reductions well below the benchmarks referred to in paragraph 2. Projects shall have the potential for widespread application or to significantly lower the costs of transitioning towards a climate-neutral economy in the sectors concerned. Priority shall be given to innovative technologies and processes addressing multiple environmental impacts. Projects involving CCU shall deliver a net reduction in emissions and ensure avoidance or permanent storage of CO₂. In the case of grants provided through calls for proposals, up to 60 % of the relevant costs of projects may be supported, out of which up to 40 % need not be dependent on verified avoidance of greenhouse gas emissions, provided that pre-determined milestones, taking into account the technology deployed, are attained. In the case of support provided through competitive bidding and in the case of technical assistance support, up to 100 % of the relevant costs of projects may be supported. The potential for emission reductions in multiple sectors offered by combined projects, including in nearby areas, shall be taken into account in the criteria used for the selection of projects.

Projects funded by the Innovation Fund shall be required to share knowledge with other relevant projects as well as with Union-based researchers having a legitimate interest. The terms of knowledge sharing shall be defined by the Commission in calls for proposals.

The calls for proposals shall be open and transparent. In preparing the calls for proposals, the Commission shall strive to ensure that all sectors are duly covered. The Commission shall take measures to ensure that the calls are communicated as widely as possible, and especially to small and medium-sized enterprises.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning rules on the operation of the Innovation Fund, including the selection procedure and criteria, and the eligible sectors and technological requirements for the different types of support.

No project shall receive support via the mechanism under this paragraph that exceeds 15 % of the total number of allowances available for this purpose. Those allowances shall be taken into account under paragraph 7.

By 31 December 2023 and every year thereafter, the Commission shall report to the Climate Change Committee referred to in Article 22a(1) of this Directive, on the implementation of the Innovation Fund, providing an analysis of projects awarded funding, by sector and by Member State, and the expected contribution of those projects towards the objective of climate neutrality in the Union as set out in Regulation (EU) 2021/1119. The Commission shall provide the report to the European Parliament and to the Council and shall make that report public.

(*) Commission Decision 2010/670/EU of 3 November 2010 laying down criteria and measures for the financing of commercial demonstration projects that aim at the environmentally safe capture and geological storage of CO₂ as well as demonstration projects of innovative renewable energy technologies under the scheme for greenhouse gas emission allowance trading within the Community established by Directive 2003/87/EC of the European Parliament and of the Council (OJ L 290, 6.11.2010, p. 39).

(**) Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 (OJ L 193, 30.7.2018, p. 1).;

- (i) the following paragraphs are inserted:

'8a. For CDs and CCDs awarded upon conclusion of a competitive bidding mechanism, appropriate coverage through budgetary commitments resulting from the proceeds of auctioning of allowances available in the Innovation Fund shall be provided and those budgetary commitments may be broken down into annual instalments over several years. For the first two rounds of the competitive bidding mechanism, coverage of the financial liability related to CDs and CCDs shall be fully ensured with appropriations resulting from the proceeds of auctioning of allowances allocated to the Innovation Fund pursuant to paragraph 8.'

On the basis of a qualitative and quantitative assessment by the Commission of the financial risks arising from the implementation of CDs and CCDs, to be made after the conclusion of the first two rounds of the competitive bidding mechanism and each time it is necessary thereafter in accordance with the principle of prudence, whereby assets and profits are not to be overestimated and liabilities and losses are not to be underestimated, the Commission may, in accordance with the empowerment in the eighth subparagraph, decide to cover only part of the financial liability related to CDs and CCDs through the means referred to in the first subparagraph and the remaining part through other means. The Commission shall aim to limit the use of other means of coverage.

Where the assessment leads to the conclusion that other means of coverage are necessary to realise the full potential of the CDs and CCDs, the Commission shall aim for a balanced mix of other means of coverage. By way of derogation from Article 210(1) of Regulation (EU, Euratom) 2018/1046, the Commission shall determine the extent of the use of other means of coverage pursuant to the delegated act provided for in the eighth subparagraph of this paragraph.

The remaining financial liability shall be sufficiently covered, having regard to the principles of Title X of Regulation (EU, Euratom) 2018/1046, if necessary, adapted to the specificities of CDs and CCDs, by way of derogation from Article 209(2), points (d) and (h), Article 210(1), Article 211(1), (2), (4) and (6), Articles 212, 213 and 214, Article 218(1) and Article 219(3) and (6) of that Regulation. Where applicable, other means of coverage, the provisioning rate and the necessary derogations shall be established in a delegated act provided for in the eighth subparagraph of this paragraph.

The Commission shall not use more than 30 % of the proceeds of the auctioning of allowances allocated to the Innovation Fund pursuant to paragraph 8 for provisioning for CDs and CCDs.

The provisioning rate shall be no lower than 50 % of the total financial liability borne by the Union budget for CDs and CCDs. When establishing the provisioning rate, the Commission shall take into account elements that may reduce the financial risks for the Union budget, beyond the appropriations available in the Innovation Fund, such as possible sharing of liability with Member States on a voluntary basis, or a possible re-insurance mechanism from the private sector. The Commission shall review the provisioning rate at least every three years from the date of application of the delegated act establishing it for the first time.

In order to avoid speculative applications, access to competitive bidding may be made conditional on the payment by applicants of a deposit to be forfeited in the event of non-fulfilment of the contract. Such forfeited deposits shall be used for the Innovation Fund as external assigned revenue pursuant to Article 21(5) of Regulation (EU, Euratom) 2018/1046. Any contribution paid to the granting authority by a beneficiary in accordance with the terms of the CD or CCD where the reference price is higher than the strike price ('reflows') shall be used for the Innovation Fund as external assigned revenue pursuant to Article 21(5) of that Regulation.

The Commission is empowered to adopt delegated acts in accordance with Article 23 of this Directive to supplement this Directive in order to provide for and detail other means of coverage, if any, and, where applicable, the provisioning rate and the necessary additional derogations from Title X of Regulation (EU, Euratom) 2018/1046 as set out in the fourth subparagraph of this paragraph, and the rules on the operation of the competitive bidding mechanism, in particular in relation to deposits and reflows.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to amend the fifth subparagraph of this paragraph by raising the limit of 30 % referred to in that subparagraph by no more than a total of 20 percentage points where necessary to respond to a demand for CDs and CCDs, taking into account the experience of the first rounds of the competitive bidding mechanism and considering the need to find an appropriate balance in the support from the Innovation Fund between grants and such contracts.

Financial support from the Innovation Fund shall be proportionate to the policy objectives set out in this Article and shall not lead to undue distortions of the internal market. To this end, support shall only be granted to cover additional costs or investment risks that cannot be borne by investors under normal market conditions.

8b. 40 million allowances from the quantity which could otherwise be allocated for free pursuant to this Article, and 10 million allowances from the quantity which could otherwise be auctioned pursuant to Article 10 of this Directive shall be made available for the Social Climate Fund established by Regulation (EU) 2023/955 of the European Parliament and of the Council (*). The Commission shall ensure that the allowances destined for the Social Climate Fund are auctioned in 2025 in accordance with the principles and modalities referred to in Article 10(4) of this Directive and the delegated act adopted in accordance with that Article. The revenues from that auctioning shall constitute external assigned revenue in accordance with Article 21(5) of Regulation (EU, Euratom) 2018/1046, and shall be used in accordance with the rules applicable to the Social Climate Fund.

(*) Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060 (OJ L 130, 16.5.2023, p. 1).;

(j) paragraph 19 is replaced by the following:

'19. No free allocation shall be given to an installation that has ceased operating. Installations for which the greenhouse gas emissions permit has expired or has been withdrawn and installations for which the operation or resumption of operation is technically impossible shall be considered to have ceased operations.';

(k) the following paragraph is added:

'22. Where corrections to free allocations granted pursuant to Article 11(2) are necessary, such corrections shall be carried out with allowances from, or by adding allowances to, the amount of allowances set aside in accordance with paragraph 7 of this Article.';

(14) in Article 10b(4), the following subparagraphs are added:

'In a Member State where, on average in the years from 2014 to 2018, its share of emissions from district heating of the Union total of such emissions, divided by that Member State's share of GDP of the Union's total GDP, is greater than five, an additional free allocation of 30 % of the quantity determined pursuant to Article 10a shall be given to district heating for the period from 2026 to 2030, provided that an investment volume equivalent to the value of that additional free allocation is invested to significantly reduce emissions before 2030 in accordance with climate-neutrality plans referred to in the third subparagraph of this paragraph and that the achievement of the targets and milestones referred to in point (b) of that subparagraph is confirmed by the verification carried out in accordance with the fourth subparagraph of this paragraph.'

By 1 May 2024, operators of district heating shall establish a climate-neutrality plan for the installations for which they apply for additional free allocation in accordance with the second subparagraph of this paragraph. That plan shall be consistent with the climate-neutrality objective set out in Article 2(1) of Regulation (EU) 2021/1119 and shall set out:

- (a) measures and investments to reach climate neutrality by 2050 at installation or company level, excluding the use of carbon offset credits;
- (b) intermediate targets and milestones to measure, by 31 December 2025 and by 31 December of each fifth year thereafter, progress made towards reaching climate neutrality as set out in point (a) of this subparagraph;
- (c) an estimate of the impact of each of the measures and investments referred to in point (a) of this subparagraph as regards the reduction of greenhouse gas emissions.

The achievement of the targets and milestones referred to in the third subparagraph, point (b), of this paragraph, shall be verified in respect of the period until 31 December 2025 and in respect of each period ending 31 December of each fifth year thereafter, in accordance with the verification and accreditation procedures provided for in Article 15. No free allowances beyond the amount referred to in the first subparagraph of this paragraph shall be allocated if the achievement of the intermediate targets and milestones has not been verified in respect of the period until the end of 2025 or in respect of the period from 2026 to 2030.

The Commission shall adopt implementing acts to specify the minimal content of the information referred to in the third subparagraph, points (a), (b) and (c), of this paragraph, and the format of the climate-neutrality plans referred to in that subparagraph and in Article 10a(1), fifth subparagraph. The Commission shall seek synergies with similar plans as provided for in Union law. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).’;

- (15) in Article 10c, paragraph 7 is replaced by the following:

‘7. Member States shall require benefiting electricity generating installations and network operators to report, by 28 February of each year, on the implementation of their selected investments, including the balance of free allocation and investment expenditure incurred and the types of investments supported. Member States shall report on this to the Commission, and the Commission shall make such reports public.’;

- (16) the following article is inserted:

‘Article 10ca

Earlier deadline for transitional free allocation for the modernisation of the energy sector

By way of derogation from Article 10c, the Member States concerned may only give transitional free allocation to installations in accordance with that Article for investments carried out until 31 December 2024. Any allowances available to the Member States concerned in accordance with Article 10c for the period from 2021 to 2030 that are not used for such investments shall, in the proportion determined by the respective Member State:

- (a) be added to the total quantity of allowances that the Member State concerned is to auction pursuant to Article 10(2); or
- (b) be used to support investments within the framework of the Modernisation Fund referred to in Article 10d, in accordance with the rules applicable to the revenue from allowances referred to in Article 10d(4).

By 15 May 2024, the Member State concerned shall notify the Commission of the respective amounts of allowances to be used under Article 10(2), first subparagraph, point (a), and, by way of derogation from Article 10d(4), second sentence, under Article 10d.’;

- (17) Article 10d is amended as follows:

- (a) paragraph 1 is replaced by the following:

‘1. A fund to support investments proposed by the beneficiary Member States, including the financing of small-scale investment projects, to modernise energy systems and improve energy efficiency shall be established for the period from 2021 to 2030 (the “Modernisation Fund”). The Modernisation Fund shall be financed through the auctioning of allowances as set out in Article 10, for the beneficiary Member States set out therein.

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. The beneficiary Member States may, where appropriate, use the resources of the Modernisation Fund to finance investments involving the adjacent Union border regions. No support from the Modernisation Fund shall be provided to energy generation facilities that use fossil fuels. However, revenue from allowances covered by a notification pursuant to paragraph 4 of this Article may be used for investments involving gaseous fossil fuels.

Furthermore, revenue from allowances referred to in Article 10(1), third subparagraph, of this Directive may, where the activity qualifies as environmentally sustainable under Regulation (EU) 2020/852 of the European Parliament and of the Council (*) and is duly justified for reasons of ensuring energy security, be used for investments involving gaseous fossil fuels provided that, for energy generation, the allowances are auctioned before 31 December 2027 and, for investments involving downstream uses of gas, the allowances are auctioned before 31 December 2028.

(*) Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (OJ L 198, 22.6.2020, p. 13).';

(b) paragraph 2 is replaced by the following:

'2. At least 80 % 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, and at least 90 % of the revenue from allowances referred to in Article 10(1), fourth subparagraph, shall be used to support investments in the following:

- (a) the generation and use of electricity from renewable sources, including renewable hydrogen;
- (b) heating and cooling from renewable sources;
- (c) the reduction of overall energy use through energy efficiency, including in industry, transport, buildings, agriculture and waste;
- (d) energy storage and the modernisation of energy networks, including demand-side management, district heating pipelines, grids for electricity transmission, the increase of interconnections between Member States and infrastructure for zero-emission mobility;
- (e) support for low-income households, including in rural and remote areas, to address energy poverty and to modernise their heating systems; and
- (f) a just transition in carbon-dependent regions in the beneficiary Member States, so as to support the redeployment, reskilling and up-skilling of workers, education, job-seeking initiatives and start-ups, in dialogue with civil society and social partners, in a manner that is consistent with and contributes to the relevant actions included by the Member States in their territorial just transition plans in accordance with Article 8(2), first subparagraph, point (k), of Regulation (EU) 2021/1056, where relevant.';

(c) paragraph 11 is replaced by the following:

'11. The investment committee shall report annually to the Commission on experience with the evaluation of investments, in particular in terms of emission reductions and abatement costs. By 31 December 2024, taking into consideration the findings of the investment committee, the Commission shall review the areas for projects referred to in paragraph 2 and the basis on which the investment committee makes its recommendations.

The investment committee shall arrange for the publication of the annual report. The Commission shall provide the annual report to the European Parliament and to the Council.';

(18) the following article is inserted:

'Article 10f

"Do no significant harm" principle

From 1 January 2025, the beneficiary Member States and the Commission shall use the revenues generated from the auctioning of allowances destined for the Innovation Fund pursuant to Article 10a(8) of this Directive, and of the allowances referred to in Article 10(1), third and fourth subparagraphs, of this Directive in accordance with the "do no significant harm" criteria set out in Article 17 of Regulation (EU) 2020/852, where such revenues are used for an economic activity for which technical screening criteria for determining whether an economic activity causes significant harm to one or more of the relevant environmental objectives have been established pursuant to Article 10(3), point (b), of that Regulation.';

(19) in Article 11(2), the date '28 February' is replaced by '30 June';

(20) the title of Chapter IV is replaced by the following:

'Provisions Applying to Aviation, Maritime Transport and Stationary Installations';

(21) Article 12 is amended as follows:

(a) paragraph 2 is replaced by the following:

'2. Member States shall ensure that allowances issued by a competent authority of another Member State are recognised for the purpose of meeting an operator's, an aircraft operator's or a shipping company's obligations under paragraph 3.';

(b) paragraph 2a is deleted;

(c) paragraph 3 is replaced by the following:

'3. The Member States, administering Member States and administering authorities in respect of a shipping company shall ensure that, by 30 September each year:

(a) the operator of each installation surrenders a number of allowances that is equal to the total emissions from that installation during the preceding calendar year, as verified in accordance with Article 15;

(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;

(c) each shipping company surrenders a number of allowances that is equal to its total emissions during the preceding calendar year, as verified in accordance with Article 3ge.

Member States, administering Member States and administering authorities in respect of a shipping company shall ensure that allowances surrendered in accordance with the first subparagraph are subsequently cancelled.';

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

'3-e. By way of derogation from paragraph 3, first subparagraph, point (c), shipping companies may surrender 5 % fewer allowances than their verified emissions released until 31 December 2030 from ice-class ships, provided that such ships have the ice class IA or IA Super or an equivalent ice class, established based on HELCOM Recommendation 25/7.

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-d. By way of derogation from paragraph 3, first subparagraph, point (c), of this Article and Article 16, the Commission shall, at the request of a Member State, provide by means of an implementing act that Member States are to consider the requirements set out in those provisions to be satisfied and that they are to take no action against shipping companies in respect of emissions released until 31 December 2030 from voyages performed by passenger ships, other than cruise passenger ships, and by ro-pax ships, between a port of an island under the jurisdiction of that requesting Member State, with no road or rail link with the mainland and with a population of fewer than 200 000 permanent residents according to the latest best data available in 2022, and a port under the jurisdiction of that same Member State, and from the activities, within a port, of such ships in relation to such voyages.

The Commission shall publish a list of the islands referred to in the first subparagraph and the ports concerned and keep that list up to date.

3-c. By way of derogation from paragraph 3, first subparagraph, point (c), of this Article and Article 16, the Commission shall, at the joint request of two Member States, one of which having no land border with another Member State and the other Member State being the geographically closest Member State to the Member State without such a land border, provide by means of an implementing act that Member States are to consider the requirements set out in those provisions to be satisfied and that they are to take no action against shipping

companies in respect of emissions released until 31 December 2030 from voyages performed by passenger or ro-pax ships in the framework of a transnational public service contract or a transnational public service obligation, set out in the joint request, connecting the two Member States, and from the activities, within a port, of such ships in relation to such voyages.'

3-b. An obligation to surrender allowances shall not arise in respect of emissions released until 31 December 2030 from voyages between a port located in an outermost region of a Member State and a port located in the same Member State, including voyages between ports within an outermost region and voyages between ports in the outermost regions of the same Member State, and from the activities, within a port, of such ships in relation to such voyages.';

(e) paragraph 3-a is replaced by the following:

'3-a. Where necessary, and for as long as is necessary, in order to protect the environmental integrity of the EU ETS, operators, aircraft operators, and shipping companies in the EU ETS shall be prohibited from using allowances that are issued by a Member State in respect of which there are obligations lapsing for operators, aircraft operators, and shipping companies. The delegated acts referred to in Article 19(3) shall include the measures necessary in the cases referred to in this paragraph.';

(f) the following paragraph is inserted:

'3b. An obligation to surrender allowances shall not arise in respect of emissions of greenhouse gases which are considered to have been captured and utilised in such a way that they have become permanently chemically bound in a product 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.

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 as referred to in the first subparagraph of this paragraph.';

(g) paragraph 4 is replaced by the following:

'4. Member States shall take the necessary steps to ensure that allowances are cancelled at any time at the request of the person holding them. In the event of closure of electricity generation capacity in their territory due to additional national measures, Member States may cancel allowances, and are strongly encouraged to do so, from the total quantity of allowances to be auctioned by them referred to in Article 10(2) up to an amount corresponding to the average verified emissions of the installation concerned over a period of five years preceding the closure. The Member State concerned shall inform the Commission of such intended cancellation, or of the reasons for not cancelling, in accordance with the delegated acts adopted pursuant to Article 10(4).';

(22) in Article 14(1), the first subparagraph is replaced by the following:

'The Commission shall 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-CO₂ 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-CO₂ aviation emissions in the requirements for monitoring and reporting of emissions and their effects, including non-CO₂ aviation effects. Those 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 how to account for storage of emissions from a mix of zero-rated sources and sources that are not zero-rated. They shall also specify how to account for emissions from renewable fuels of non-biological origin and recycled carbon fuels, ensuring that such emissions are accounted for and that double counting is avoided.';

(23) Article 16 is amended as follows:

(a) paragraph 2 is replaced by the following:

'2. Member States shall ensure the publication of the names of operators, aircraft operators and shipping companies that are in breach of requirements to surrender sufficient allowances under this Directive.';

(b) in paragraph 3, the date '30 April' is replaced by '30 September';

(c) the following paragraph is inserted:

'3a. The penalties set out in paragraph 3 shall also apply in respect of shipping companies.';

(d) the following paragraph is inserted:

'11a. In the case of a shipping company that has failed to comply with the surrender obligations for two or more consecutive reporting periods, and where other enforcement measures have failed to ensure compliance, the competent authority of the Member State of the port of entry may, after giving the opportunity to the shipping company concerned to submit its observations, issue an expulsion order, which shall be notified to the Commission, the European Maritime Safety Agency (EMSA), the other Member States and the flag State concerned. As a result of the issuing of such an expulsion order, every Member State, with the exception of the Member State whose flag the ship is flying, shall refuse entry of the ships under the responsibility of the shipping company concerned into any of its ports until the shipping company fulfils its surrender obligations in accordance with Article 12. Where the ship flies the flag of a Member State and enters or is found in one of its ports, the Member State concerned shall, after giving the opportunity to the shipping company concerned to submit its observations, detain the ship until the shipping company fulfils its surrender obligations.

Where a ship of a shipping company as referred to in the first subparagraph is found in one of the ports of the Member State whose flag the ship is flying, the Member State concerned may, after giving the opportunity to the shipping company concerned to submit its observations, issue a flag State detention order until the shipping company fulfils its surrender obligations. It shall inform the Commission, EMSA and the other Member States thereof. As a result of the issuing of such a flag State detention order, every Member State shall take the same measures as are required to be taken following the issuing of an expulsion order in accordance with the first subparagraph, second sentence.

This paragraph shall be without prejudice to international maritime rules applicable in the case of ships in distress.';

(24) Article 18b is replaced by the following:

'Article 18b

Assistance from the Commission, EMSA and other relevant organisations

1. For the purposes of carrying out its obligations under Article 3c(4) and Articles 3g, 3gd, 3ge, 3gf, 3gg and 18a, the Commission, the administering Member State and administering authorities in respect of a shipping company may request the assistance of EMSA or another relevant organisation and may conclude to that effect any appropriate agreements with those organisations.

2. The Commission, assisted by EMSA, shall endeavour to develop appropriate tools and guidance to facilitate and coordinate verification and enforcement activities related to the application of this Directive to maritime transport. As far as practicable, such guidance and tools shall be made available to the Member States and the verifiers for information-sharing purposes and in order to better ensure robust enforcement of the national measures transposing this Directive.';

(25) Article 23 is amended as follows:

(a) paragraphs 2 and 3 are replaced by the following:

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

3. The delegation of power referred to in Article 3c(6), Article 3d(3), Article 10(4), Article 10a(1), (8) and (8a), Article 10b(5), Article 12(3b), Article 19(3), Article 22, Article 24(3), Article 24a(1), Article 25a(1), Article 28c and Article 30j(1) 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.';

(b) paragraph 6 is replaced by the following:

'6. A delegated act adopted pursuant to Article 3c(6), Article 3d(3), Article 10(4), Article 10a(1), (8) or (8a), Article 10b(5), Article 12(3b), Article 19(3), Article 22, Article 24(3), Article 24a(1), Article 25a(1), Article 28c or Article 30j(1) 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.';

(26) Article 29 is replaced by the following:

'Article 29

Report to ensure the better functioning of the carbon market

If the regular reports on the carbon market referred to in Article 10(5) and (6) contain evidence that the carbon market is not functioning properly, the Commission shall within a period of three months submit a report to the European Parliament and to the Council. The report may be accompanied, where appropriate, by legislative proposals aiming at increasing the transparency and integrity of the carbon market, including related derivative markets, and addressing the corrective measures to improve its functioning, as well as to enhance the prevention and detection of market abuse activities.';

(27) Article 29a is replaced by the following:

'Article 29a

Measures in the event of excessive price fluctuations

1. If the average allowance price for the six preceding calendar months is more than 2,4 times the average allowance price for the preceding two-year reference period, 75 million allowances shall be released from the market stability reserve in accordance with Article 1(7) of Decision (EU) 2015/1814.

The allowance price referred to in the first subparagraph of this paragraph shall, for allowances covered by Chapters II and III, be the price of auctions carried out in accordance with the delegated acts adopted pursuant to Article 10(4).

The preceding two-year reference period referred to in the first subparagraph shall be the two-year period that ends before the first month of the period of six calendar months referred to in that subparagraph.

Where the condition in the first subparagraph of this paragraph is met and paragraph 2 is not applicable, the Commission shall publish a notice to that effect in the *Official Journal of the European Union* indicating the date on which the condition was fulfilled.

The Commission shall publish within the first three working days of each month the average allowance price for the preceding six calendar months and the average allowance price for the preceding two-year reference period. If the condition referred to in the first subparagraph is not met, the Commission shall also publish the level that the average allowance price would have to reach in the next month in order to meet the condition referred to in that subparagraph.

2. When the condition for release of allowances from the market stability reserve pursuant to paragraph 1 has been met, the condition referred to in that paragraph shall not be considered to have been met again until at least twelve months after the end of the previous release.

3. The detailed arrangements for the application of the measures referred to in paragraphs 1 and 2 of this Article shall be laid down in the delegated acts referred to in Article 10(4).;

(28) Article 30 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. This Directive shall be kept under review in the light of international developments and efforts undertaken to achieve the long-term objectives of the Paris Agreement, and of any relevant commitments resulting from the Conferences of the Parties to the United Nations Framework Convention on Climate Change.;

(b) paragraph 2 is replaced by the following:

'2. The measures to support certain energy-intensive industries that may be subject to carbon leakage referred to in Articles 10a and 10b of this Directive shall also be kept under review in the light of climate policy measures in other major economies. In this context, the Commission shall also consider whether measures in relation to the compensation of indirect costs should be further harmonised. The measures applicable to CBAM sectors shall be kept under review in light of the application of Regulation (EU) 2023/956. Before 1 January 2028, and every two years thereafter, as part of its reports to the European Parliament and to the Council pursuant to Article 30(6) of that Regulation, the Commission shall assess the impact of CBAM on the risk of carbon leakage, including in relation to exports.

The report shall assess the need for taking additional measures, including legislative measures, to address carbon leakage risks. The report shall, where appropriate, be accompanied by a legislative proposal.;

(c) paragraph 3 is replaced by the following:

'3. The Commission shall report to the European Parliament and to the Council in the context of each global stocktake agreed under the Paris Agreement, in particular with regard to the need for additional Union policies and measures in view of necessary greenhouse gas reductions by the Union and its Member States, including in relation to the linear factor referred to in Article 9 of this Directive. The Commission may, where appropriate, submit legislative proposals to the European Parliament and to the Council to amend this Directive, in particular in order to ensure compliance with the climate-neutrality objective laid down in Article 2(1) of Regulation (EU) 2021/1119 and the Union climate targets laid down in Article 4 of that Regulation. When making its legislative proposals, the Commission shall, to that end, consider, inter alia, the projected indicative Union greenhouse gas budget for the period from 2030 to 2050 as referred to in Article 4(4) of that Regulation.;

(d) the following paragraphs are added:

'5. By 31 July 2026, the Commission shall report to the European Parliament and to the Council on the following matters, accompanied, where appropriate, by a legislative proposal and impact assessment:

(a) how negative emissions resulting from greenhouse gases that are removed from the atmosphere and safely and permanently stored could be accounted for and how those negative emissions could be covered by emissions trading, if appropriate, including a clear scope and strict criteria for such coverage, and safeguards to ensure that such removals do not offset necessary emission reductions in accordance with Union climate targets laid down in Regulation (EU) 2021/1119;

(b) the feasibility of lowering the 20 MW total rated thermal input thresholds for the activities in Annex I from 2031;

(c) whether all greenhouse gas emissions covered by this Directive are effectively accounted for, and whether double counting is effectively avoided; in particular, it shall assess the accounting of the greenhouse gas emissions which are considered to have been captured and utilised in a product in a manner other than that referred to in Article 12(3b).

6. When reviewing this Directive, in accordance with paragraphs 1, 2 and 3 of this Article, the Commission shall analyse how linkages between the EU ETS and other carbon markets can be established without impeding the achievement of the climate-neutrality objective and the Union climate targets laid down in Regulation (EU) 2021/1119.

7. By 31 July 2026, the Commission shall present a report to the European Parliament and to the Council in which it shall assess the feasibility of including municipal waste incineration installations in the EU ETS, including with a view to their inclusion from 2028 and with an assessment of the potential need for an option for a Member State to opt out until 31 December 2030. In that regard, the Commission shall take into account the importance of all sectors contributing to emission reductions and potential diversion of waste towards disposal by landfilling in the Union and waste exports to third countries. The Commission shall in addition take into account relevant criteria such as the effects on the internal market, potential distortions of competition, environmental integrity, alignment with the objectives of Directive 2008/98/EC of the European Parliament and of the Council (*) and robustness and accuracy with regard to the monitoring and calculation of emissions. The Commission shall, where appropriate and without prejudice to Article 4 of that Directive, accompany that report with a legislative proposal to apply the provisions of this Chapter to greenhouse gas emissions permits and the allocation and issue of additional allowances in respect of municipal waste incineration installations, and to prevent potential diversion of waste.

In the report referred to in the first subparagraph, the Commission shall also assess the possibility of including in the EU ETS other waste management processes, in particular landfills which create methane and nitrous oxide emissions in the Union. The Commission may, where appropriate, also accompany that report with a legislative proposal to include such other waste management processes in the EU ETS.

(*) 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).;

(29) the following Chapter is inserted after Article 30:

'Chapter IVa

Emissions Trading System for Buildings, Road Transport and additional Sectors

Article 30a

Scope

The provisions of this Chapter shall apply to emissions, greenhouse gas emissions permits, the issue and surrender of allowances, monitoring, reporting and verification in respect of the activity referred to in Annex III. This Chapter shall not apply to any emissions covered by Chapters II and III.

Article 30b

Greenhouse gas emissions permits

1. Member States shall ensure that, from 1 January 2025, no regulated entity carries out the activity referred to in Annex III unless that regulated entity holds a permit issued by a competent authority in accordance with paragraphs 2 and 3 of this Article.

2. An application to the competent authority by the regulated entity pursuant to paragraph 1 of this Article for a greenhouse gas emissions permit under this Chapter shall include, at least, a description of:

(a) the regulated entity;

- (b) the type of fuels it releases for consumption and which are used for combustion in the sectors referred to in Annex III and the means through which it releases those fuels for consumption;
- (c) the end use or end uses of the fuels released for consumption for the activity referred to in Annex III;
- (d) the measures planned to monitor and report emissions, in accordance with the implementing acts referred to in Articles 14 and 30f;
- (e) a non-technical summary of the information referred to in points (a) to (d) of this paragraph.

3. The competent authority shall issue a greenhouse gas emissions permit granting authorisation to the regulated entity referred to in paragraph 1 of this Article for the activity referred to in Annex III, if it is satisfied that the entity is capable of monitoring and reporting emissions corresponding to the quantities of fuels released for consumption pursuant to Annex III.

4. Greenhouse gas emissions permits shall contain, at least, the following:

- (a) the name and address of the regulated entity;
- (b) a description of the means by which the regulated entity releases the fuels for consumption in the sectors covered by this Chapter;
- (c) a list of the fuels the regulated entity releases for consumption in the sectors covered by this Chapter;
- (d) a monitoring plan that fulfils the requirements established by the implementing acts referred to in Article 14;
- (e) reporting requirements established by the implementing acts referred to in Article 14;
- (f) an obligation to surrender allowances issued under this Chapter, equal to the total emissions in each calendar year, as verified in accordance with Article 15, by the deadline laid down in Article 30e(2).

5. Member States may allow the regulated entities to update monitoring plans without changing the permit. Regulated entities shall submit any updated monitoring plans to the competent authority for approval.

6. The regulated entity shall inform the competent authority of any planned changes to the nature of its activity or to the fuels it releases for consumption, which may require updating the greenhouse gas emissions permit. Where appropriate, the competent authority shall update the permit in accordance with the implementing acts referred to in Article 14. Where there is a change in the identity of the regulated entity covered by this Chapter, the competent authority shall update the permit to include the name and address of the new regulated entity.

Article 30c

Union-wide quantity of allowances

1. The Union-wide quantity of allowances issued under this Chapter each year from 2027 shall decrease in a linear manner beginning in 2024. The 2024 value shall be defined as the 2024 emission limits, calculated on the basis of the reference emissions under Article 4(2) of Regulation (EU) 2018/842 of the European Parliament and of the Council (*) for the sectors covered by this Chapter and applying the linear reduction trajectory for all emissions within the scope of that Regulation. The quantity shall decrease each year after 2024 by a linear reduction factor of 5,10 %. By 1 January 2025, the Commission shall publish the Union-wide quantity of allowances for the year 2027.

2. The Union-wide quantity of allowances issued under this Chapter each year from 2028 shall decrease in a linear manner beginning from 2025 on the basis of the average emissions reported under this Chapter for the years 2024 to 2026. The quantity of allowances shall decrease by a linear reduction factor of 5,38 %, except if the conditions set out in point 1 of Annex IIIa apply, in which case the quantity shall decrease by a linear reduction factor adjusted in accordance with the rules set out in point 2 of Annex IIIa. By 30 June 2027, the Commission shall publish the Union-wide quantity of allowances for 2028 and, if required, the adjusted linear reduction factor.

3. The Union-wide quantity of allowances issued under this Chapter shall be adjusted for each year from 2028 to compensate for the quantity of allowances surrendered in cases where it was not possible to avoid double counting of emissions or where allowances have been surrendered for emissions not covered by this Chapter as referred to in Article 30f(5). The adjustment shall correspond to the total amount of allowances covered by this Chapter which were compensated for in the relevant reporting year pursuant to the implementing acts referred to in Article 30f(5), second subparagraph.

4. A Member State that, pursuant to Article 30j, unilaterally extends the activity referred to in Annex III to sectors that are not listed in that Annex shall ensure that the regulated entities concerned submit, by 30 April of the relevant year, to the relevant competent authority a duly substantiated report in accordance with Article 30f. If the data submitted are duly substantiated, the competent authority shall notify the Commission thereof by 30 June of the relevant year. The quantity of allowances to be issued under paragraph 1 of this Article shall be adjusted taking into account the duly substantiated reports submitted by the regulated entities.

Article 30d

Auctioning of allowances for the activity referred to in Annex III

1. From 2027, allowances covered by this Chapter shall be auctioned, unless they are placed in the market stability reserve established by Decision (EU) 2015/1814. The allowances covered by this Chapter shall be auctioned separately from the allowances covered by Chapters II and III of this Directive.

2. The auctioning of the allowances under this Chapter shall start in 2027 with an amount corresponding to 130 % of the auction volumes for 2027 established on the basis of the Union-wide quantity of allowances for that year and the respective auction shares and volumes pursuant to paragraphs 3 to 6 of this Article. The additional 30 % to be auctioned shall only be used for surrendering allowances pursuant to Article 30e(2) and may be auctioned until 31 May 2028. The additional 30% shall be deducted from the auction volumes for the period from 2029 to 2031. The conditions for the auctions provided for in this paragraph shall be set in accordance with paragraph 7 of this Article and Article 10(4).

In 2027, 600 million allowances covered by this Chapter shall be created as holdings in the market stability reserve pursuant to Article 1a(3) of Decision (EU) 2015/1814.

3. 150 million allowances issued under this Chapter shall be auctioned and all revenues from those auctions made available for the Social Climate Fund established by Regulation (EU) 2023/955 until 2032.

4. From the remaining amount of allowances and in order to generate, together with the revenue from the allowances referred to in paragraph 3 of this Article and Article 10a(8b) of this Directive, a maximum amount of EUR 65 000 000 000, the Commission shall ensure that an additional amount of allowances covered by this Chapter is auctioned and the revenues from those auctions are made available for the Social Climate Fund established by Regulation (EU) 2023/955 until 2032.

The Commission shall ensure that the allowances destined for the Social Climate Fund referred to in paragraph 3 of this Article and in this paragraph are auctioned in accordance with the principles and modalities referred to in Article 10(4) and the delegated acts adopted pursuant to that Article.

The revenues from the auctioning of the allowances referred to in paragraph 3 of this Article and in this paragraph shall constitute external assigned revenue in accordance with Article 21(5) of Regulation (EU, Euratom) 2018/1046, and shall be used in accordance with the rules applicable to the Social Climate Fund.

The annual amount allocated to the Social Climate Fund in accordance with Article 10a(8b), paragraph 3 of this Article and this paragraph shall not exceed:

- (a) for 2026, EUR 4 000 000 000;
- (b) for 2027, EUR 10 900 000 000;

- (c) for 2028, EUR 10 500 000 000;
- (d) for 2029, EUR 10 300 000 000;
- (e) for 2030, EUR 10 100 000 000;
- (f) for 2031, EUR 9 800 000 000;
- (g) for 2032, EUR 9 400 000 000.

Where the emissions trading system established in accordance with this Chapter is postponed until 2028 pursuant to Article 30k, the maximum amount to be made available to the Social Climate Fund in accordance with the first subparagraph of this paragraph shall be EUR 54 600 000 000. In such a case, the annual amounts allocated to the Social Climate Fund shall not exceed cumulatively for the years 2026 and 2027, EUR 4 000 000 000, and for the period from 1 January 2028 until 31 December 2032, the relevant annual amount shall not exceed:

- (a) for 2028, EUR 11 400 000 000;
- (b) for 2029, EUR 10 300 000 000;
- (c) for 2030, EUR 10 100 000 000;
- (d) for 2031, EUR 9 800 000 000;
- (e) for 2032, EUR 9 000 000 000.

Where revenue generated from the auctioning referred to in paragraph 5 of this Article is established as an own resource in accordance with Article 311, third paragraph, TFEU, Article 10a(8b) of this Directive, paragraph 3 of this Article and this paragraph shall not be applicable.

5. The total quantity of allowances covered by this Chapter, after deducting the quantities set out in paragraphs 3 and 4 of this Article, shall be auctioned by the Member States and distributed amongst them in shares that are identical to the share of reference emissions under Article 4(2) of Regulation (EU) 2018/842 for the categories of emission sources referred to in the second paragraph, points (b), (c) and (d), of Annex III to this Directive for the average of the period from 2016 to 2018 of the Member State concerned, as comprehensively reviewed pursuant to Article 4(3) of that Regulation.

6. Member States shall determine the use of revenues generated from the auctioning of allowances referred to in paragraph 5 of this Article, except for the revenues constituting external assigned revenue in accordance with paragraph 4 of this Article or the revenues established as own resources in accordance with Article 311, third paragraph, TFEU and entered in the Union budget. Member States shall use their revenues or the equivalent in financial value of those revenues for one or more of the purposes referred to in Article 10(3) of this Directive, giving priority to activities that can contribute to addressing social aspects of the emissions trading under this Chapter, or for one or more of the following:

- (a) measures intended to contribute to the decarbonisation of heating and cooling of buildings or to the reduction of the energy needs of buildings, including the integration of renewable energies and related measures in accordance with Article 7(11) and Articles 12 and 20 of Directive 2012/27/EU, as well as measures to provide financial support for low-income households in worst-performing buildings;
- (b) measures intended to accelerate the uptake of zero-emission vehicles or to provide financial support for the deployment of fully interoperable refuelling and recharging infrastructure for zero-emission vehicles, or measures to encourage a shift to public transport and improve multimodality, or to provide financial support in order to address social aspects concerning low- and middle-income transport users;
- (c) to finance their Social Climate Plan in accordance with Article 15 of Regulation (EU) 2023/955;
- (d) to provide financial compensation to the final consumers of fuels in cases where it has not been possible to avoid double counting of emissions or where allowances have been surrendered for emissions not covered by this Chapter as referred to in Article 30f(5).

Member States shall be deemed to have fulfilled the provisions of this paragraph if they have in place and implement fiscal or financial support policies or regulatory policies which leverage financial support, established for the purposes set out in the first subparagraph of this paragraph, and which have a value equivalent to the revenues referred to in that subparagraph generated from the auctioning of allowances referred to in this Chapter.

Member States shall inform the Commission as to the use of revenues and the actions taken pursuant to this paragraph by including this information in their reports submitted under Regulation (EU) 2018/1999.

7. Article 10(4) and (5) shall apply to the allowances issued under this Chapter.

Article 30e

Transfer, surrender and cancellation of allowances

1. Article 12 shall apply to the emissions, regulated entities and allowances covered by this Chapter, with the exception of paragraphs 3 and 3a, paragraph 4, second and third sentence, and paragraph 5 of that Article. For that purpose:

- (a) any reference to emissions shall be read as if it were a reference to the emissions covered by this Chapter;
- (b) any reference to operators of installations shall be read as if it were a reference to the regulated entities covered by this Chapter;
- (c) any reference to allowances shall be read as if it were a reference to the allowances covered by this Chapter.

2. From 1 January 2028, Member States shall ensure that, by 31 May each year, the regulated entity surrenders an amount of allowances covered by this Chapter that is equal to the regulated entity's total emissions, corresponding to the quantity of fuels released for consumption pursuant to Annex III, during the preceding calendar year as verified in accordance with Articles 15 and 30f, and that those allowances are subsequently cancelled.

3. Until 31 December 2030, by way of derogation from paragraphs 1 and 2 of this Article, where a regulated entity established in a given Member State is subject to a national carbon tax in force for the years 2027 to 2030, covering the activity referred to in Annex III, the competent authority of the Member State concerned may exempt that regulated entity from the obligation to surrender allowances under paragraph 2 of this Article for a given reference year, provided that:

- (a) the Member State concerned notifies the Commission of that national carbon tax by 31 December 2023, and the national law setting the tax rates applicable for the years 2027 to 2030 has, by that date, entered into force; the Member State concerned shall notify the Commission of any subsequent change to the national carbon tax;
- (b) 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;
- (c) the regulated entity fully complies with the obligations under Article 30b on greenhouse emissions permits and Article 30f on monitoring, reporting and verification of its emissions;
- (d) the Member State concerned notifies the Commission of the application of any such exemption and the corresponding amount of allowances to be cancelled in accordance with point (g) of this subparagraph and the delegated acts adopted pursuant to Article 10(4), by 31 May of the year after the reference year;
- (e) 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 point (a) of this subparagraph or within one month of the notification for the relevant year under point (d) of this subparagraph;

- (f) the Member State concerned does not auction the amount of allowances referred to in Article 30d(5) for a particular reference year until the amount of allowances to be cancelled under this paragraph is determined in accordance with point (g) of this subparagraph; the Member State concerned shall not auction any of the additional amount of allowances pursuant to Article 30d(2), first subparagraph;
- (g) the Member State concerned cancels an amount of allowances from the total quantity of allowances to be auctioned by it, referred to in Article 30d(5), for the reference year, which is equal to the verified emissions of that regulated entity under this Chapter for the reference year; where the amount of allowances that remains to be auctioned in the reference year following application of point (f) of this subparagraph is below the amount of allowances to be cancelled under this paragraph, the Member State concerned shall ensure that it cancels the amount of allowances corresponding to the difference by the end of the year after the reference year; and
- (h) the Member State concerned commits, at the time of the first notification under point (a) of this subparagraph, to using for one or more of the measures listed or referred to in Article 30d(6), first subparagraph, an amount equivalent to the revenues to which Article 30d(6) would have applied in the absence of this derogation; Article 30d(6), second and third subparagraphs, shall apply and the Commission shall ensure that the information received pursuant thereto is in conformity with the commitment made under this point.

The amount of allowances to be cancelled under the first subparagraph, point (g), of this paragraph shall not affect the external assigned revenue established pursuant to Article 30d(4) of this Directive or, 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 30d of this Directive.

4. Hospitals which are not covered by Chapter III may be provided with financial compensation for the cost passed on to them due to the surrender of allowances under this Chapter. For that purpose, the provisions of this Chapter applicable to cases of double counting shall apply *mutatis mutandis*.

Article 30j

Monitoring, reporting, verification of emissions and accreditation

1. Articles 14 and 15 shall apply to the emissions, regulated entities and allowances covered by this Chapter. For that purpose:
 - (a) any reference to emissions shall be read as if it were a reference to the emissions covered by this Chapter;
 - (b) any reference to an activity listed in Annex I shall be read as if it were a reference to the activity referred to in Annex III;
 - (c) any reference to operators shall be read as if it were a reference to the regulated entities covered by this Chapter;
 - (d) any reference to allowances shall be read as if it were a reference to the allowances covered by this Chapter;
 - (e) the reference to the date in Article 15 shall be read as if it were a reference to 30 April.
2. Member States shall ensure that each regulated entity monitors for each calendar year from 2025 the emissions corresponding to the quantities of fuels released for consumption pursuant to Annex III. They shall also ensure that each regulated entity reports those emissions to the competent authority in the following year, starting in 2026, in accordance with the implementing acts referred to in Article 14(1).
3. From 1 January 2028, Member States shall ensure that, by 30 April each year until 2030, each regulated entity reports the average share of costs related to the surrender of allowances under this Chapter which it passed on to consumers for the preceding year. The Commission shall adopt implementing acts concerning the requirements and templates for those reports. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2). The Commission shall assess the submitted reports and annually report its findings to the European Parliament and to the Council. Where the Commission finds that improper practices exist with regard to the passing on of carbon costs, the report may be accompanied, where appropriate, by legislative proposals aimed at addressing such improper practices.

4. Member States shall ensure that each regulated entity holding a permit in accordance with Article 30b on 1 January 2025 reports its historical emissions for the year 2024 by 30 April 2025.

5. Member States shall ensure that the regulated entities are able to identify and document reliably and accurately, per type of fuel, the precise quantities of fuel released for consumption which are used for combustion in the sectors referred to in Annex III, and the final use of the fuels released for consumption by the regulated entities. The Member States shall take appropriate measures to limit the risk of double counting of emissions covered under this Chapter and the emissions under Chapters II and III, as well as the risk of allowances being surrendered for emissions not covered by this Chapter.

The Commission shall adopt implementing acts concerning the detailed rules for avoiding double counting and allowances being surrendered for emissions not covered by this Chapter, as well as for providing financial compensation to the final consumers of the fuels in cases where such double counting or surrender cannot be avoided. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2). The calculation of the financial compensation for the final consumers of the fuels shall be based on the average price of allowances in the auctions carried out in accordance with the delegated acts adopted pursuant to Article 10(4) in the relevant reporting year.

6. The principles for monitoring and reporting of emissions covered by this Chapter are set out in Part C of Annex IV.

7. The criteria for the verification of emissions covered by this Chapter are set out in Part C of Annex V.

8. Member States may allow simplified monitoring, reporting and verification measures for regulated entities whose annual emissions corresponding to the quantities of fuels released for consumption are less than 1 000 tonnes of CO₂ equivalent, in accordance with the implementing acts referred to in Article 14(1).

Article 30g

Administration

Articles 13 and 15a, Article 16(1), (2), (3), (4) and (12), and Articles 17, 18, 19, 20, 21, 22, 22a, 23 and 29 shall apply to the emissions, regulated entities and allowances covered by this Chapter. For that purpose:

- (a) any reference to emissions shall be read as if it were a reference to emissions covered by this Chapter;
- (b) any reference to operators shall be read as if it were a reference to regulated entities covered by this Chapter;
- (c) any reference to allowances shall be read as if it were a reference to the allowances covered by this Chapter.

Article 30h

Measures in the event of an excessive price increase

1. Where, for more than three consecutive months, the average price of allowances in the auctions carried out in accordance with the delegated acts adopted pursuant to Article 10(4) of this Directive is more than twice the average price of allowances during the six preceding consecutive months in the auctions for the allowances covered by this Chapter, 50 million allowances covered by this Chapter shall be released from the market stability reserve in accordance with Article 1a(7) of Decision (EU) 2015/1814.

For the years 2027 and 2028, the condition referred to in the first subparagraph shall be met where, for more than three consecutive months, the average price of allowances is more than 1,5 times the average price of allowances during the reference period of the six preceding consecutive months.

2. Where the average price of allowances referred to in paragraph 1 of this Article exceeds a price of EUR 45 for a period of two consecutive months, 20 million allowances covered by this Chapter shall be released from the market stability reserve in accordance with Article 1a(7) of Decision (EU) 2015/1814. Indexation based on the European index of consumer prices for 2020 shall apply. Allowances shall be released through the mechanism provided for in this paragraph up to 31 December 2029.

3. Where the average price of allowances referred to in paragraph 1 of this Article is more than three times the average price of allowances during the six preceding consecutive months, 150 million allowances covered by this Chapter shall be released from the market stability reserve in accordance with Article 1a(7) of Decision (EU) 2015/1814.

4. Where the condition referred to in paragraph 2 has been met on the same day as the condition referred to in paragraph 1 or 3, additional allowances shall be released only pursuant to paragraph 1 or 3.

5. Before 31 December 2029, the Commission shall present a report to the European Parliament and to the Council in which it assesses whether the mechanism referred to in paragraph 2 has been effective and whether it should be continued. The Commission shall, where appropriate, accompany that report with a legislative proposal to the European Parliament and to the Council to amend this Directive to adjust that mechanism.

6. Where one or more of the conditions referred to in paragraph 1, 2 or 3 have been met and resulted in a release of allowances, additional allowances shall not be released pursuant to this Article earlier than 12 months thereafter.

7. Where, within the second half of the period of 12 months referred to in paragraph 6 of this Article, the condition referred to in paragraph 2 of this Article has been met again, the Commission shall, assisted by the Committee established by Article 44 of Regulation (EU) 2018/1999, assess the effectiveness of the measure and may by means of an implementing act decide that paragraph 6 of this Article is not to apply. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 22a(2) of this Directive.

8. Where one or more of the conditions referred to in paragraph 1, 2 or 3 have been met and paragraph 6 is not applicable, the Commission shall promptly publish a notice in the *Official Journal of the European Union* concerning the date on which that or those conditions were met.

9. Member States that are subject to the obligation to provide a corrective action plan in accordance with Article 8 of Regulation (EU) 2018/842 shall take due account of the effects of a release of additional allowances pursuant to paragraph 2 of this Article during the previous two years when considering additional actions to be implemented as referred to in Article 8(1), first subparagraph, point (c), of that Regulation in order to meet their obligations under that Regulation.

Article 30i

Review of this Chapter

By 1 January 2028, the Commission shall report to the European Parliament and to the Council on the implementation of the provisions of this Chapter with regard to their effectiveness, administration and practical application, including on the application of the rules under Decision (EU) 2015/1814. Where appropriate, the Commission shall accompany that report with a legislative proposal to amend this Chapter. By 31 October 2031, the Commission shall assess the feasibility of integrating the sectors covered by Annex III to this Directive into the EU ETS covering the sectors listed in Annex I to this Directive.

Article 30j

Procedures for unilateral extension of the activity referred to in Annex III to other sectors not subject to Chapters II and III

1. From 2027, Member States may extend the activity referred to in Annex III to sectors that are not listed in that Annex and thereby apply emissions trading in accordance with this Chapter in such sectors, taking into account all relevant criteria, in particular the effects on the internal market, potential distortions of competition, the environmental integrity of the emissions trading system established pursuant to this Chapter and the reliability of the planned monitoring and reporting system, provided that the extension of the activity referred to in that Annex is approved by the Commission.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the approval of an extension as referred to in the first subparagraph of this paragraph, authorisation for the issue of additional allowances and authorisation of other Member States to extend the activity referred to in Annex III. The Commission may also, when adopting such delegated acts, supplement the extension with further rules governing measures to address possible instances of double counting, including for the issue of additional allowances to compensate for allowances surrendered for use of fuels in activities listed in Annex I. Any financial measures by Member States in favour of companies in sectors and subsectors which are exposed to a genuine risk of carbon leakage, due to significant indirect costs that are incurred from greenhouse gas emission costs passed on in fuel prices due to the unilateral extension, shall be in accordance with State aid rules, and shall not cause undue distortions of competition in the internal market.

2. Additional allowances issued pursuant to an authorisation under this Article shall be auctioned in line with the requirements laid down in Article 30d. Notwithstanding Article 30d(1) to (6), Member States having unilaterally extended the activity referred to in Annex III in accordance with this Article shall determine the use of revenues generated from the auctioning of those additional allowances.

Article 30k

Postponement of emissions trading for buildings, road transport and additional sectors until 2028 in the event of exceptionally high energy prices

1. By 15 July 2026, the Commission shall publish a notice in the *Official Journal of the European Union* concerning whether one or both of the following conditions have been met:

- (a) the average TTF gas price for the six calendar months ending 30 June 2026 was higher than the average TTF gas price in February and March 2022;
- (b) the average Brent crude oil price for the six calendar months ending 30 June 2026 was more than twice the average Brent crude oil price during the five preceding years; the five-year reference period shall be the five-year period that ends before the first month of the period of six calendar months.

2. Where one or both of the conditions referred to in paragraph 1 are met, the following rules shall apply:

- (a) by way of derogation from Article 30c(1), the first year for which the Union-wide quantity of allowances is established shall be 2028 and, by way of derogation from Article 30c(3), the first year for which the Union-wide quantity of allowances is adjusted shall be 2029;
- (b) by way of derogation from Article 30d(1) and (2), the start of auctioning of allowances under this Chapter shall be postponed to 2028;
- (c) by way of derogation from Article 30d(2), the additional amount of allowances for the first year of auctions shall be deducted from the auction volumes for the period from 2030 to 2032 and the initial holdings in the market stability reserve shall be created in 2028;
- (d) by way of derogation from Article 30e(2), the deadline for initial surrendering of allowances shall be put back to 31 May 2029 for total emissions in the year 2028;
- (e) by way of derogation from Article 30i, the deadline for the Commission to report to the European Parliament and to the Council shall be put back to 1 January 2029.

(*) Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

(**) Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the system of own resources of the European Union and repealing Decision 2014/335/EU, Euratom (OJ L 424, 15.12.2020, p. 1).;

(30) the following Chapter is inserted:

'Chapter IVb

Scientific Advice and Visibility of Funding

Article 30l

Scientific advice

The European Scientific Advisory Board on Climate Change (the 'Advisory Board') established under Article 10a of Regulation (EC) No 401/2009 of the European Parliament and of the Council (*) may, on its own initiative, provide scientific advice and issue reports regarding this Directive. The Commission shall take into account the relevant advice and reports of the Advisory Board, in particular as regards:

- (a) the need for additional Union policies and measures to ensure compliance with the objectives and targets referred to in Article 30(3) of this Directive;
- (b) the need for additional Union policies and measures in view of agreements on global measures within ICAO to reduce the climate impact of aviation, and of the ambition and environmental integrity of the global market-based measure of the IMO referred to in Article 3gg of this Directive.

Article 30m

Information, communication and publicity

1. The Commission shall ensure the visibility of funding from EU ETS auctioning revenues referred to in Article 10a(8) by:

- (a) ensuring that the beneficiaries of such funding acknowledge the origin of those funds and ensure the visibility of the Union funding, in particular when promoting the projects and their results, by providing coherent, effective and proportionate targeted information to multiple audiences, including the media and the public; and
- (b) ensuring that the recipients of such funding use an appropriate label that reads '(co-)funded by the EU Emissions Trading System (the Innovation Fund)', as well as the emblem of the Union and the amount of funding; where the use of that label is not feasible, the Innovation Fund shall be mentioned in all communication activities, including on notice boards at strategic places visible to the public.

The Commission shall in the delegated act referred to in Article 10a(8) set out the necessary requirements to ensure the visibility of funding from the Innovation Fund, including a requirement to mention that Fund.

2. Member States shall ensure the visibility of funding from EU ETS auctioning revenues referred to in Article 10d corresponding to what is referred to in paragraph 1, first subparagraph, points (a) and (b), of this Article, including through a requirement to mention the Modernisation Fund.

3. Taking into account national circumstances, the Member States shall endeavour to 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).

(*) Regulation (EC) No 401/2009 of the European Parliament and of the Council of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network (OJ L 126, 21.5.2009, p. 13).';

(31) Annexes I, IIb, IV and V to Directive 2003/87/EC are amended in accordance with Annex I to this Directive, and Annexes III and IIIa are inserted in Directive 2003/87/EC as set out in Annex I to this Directive.

Article 2**Amendments to Decision (EU) 2015/1814**

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

(1) Article 1 is amended as follows:

(a) paragraph 4 is replaced by the following:

'4. The Commission shall publish the total number of allowances in circulation each year by 1 June of the subsequent year. The total number of allowances in circulation in a given year shall be the cumulative number of allowances issued in respect of installations and shipping companies and not placed in the reserve in the period since 1 January 2008, including the number of allowances that were issued pursuant to Article 13(2) of Directive 2003/87/EC, in the version in force on 18 March 2018, in that period and entitlements to use international credits exercised by installations under the EU ETS, up to 31 December of that given year, minus the cumulative tonnes of verified emissions from installations and shipping companies under the EU ETS between 1 January 2008 and 31 December of that same given year, and any allowances cancelled in accordance with Article 12(4) of Directive 2003/87/EC. No account shall be taken of emissions during the three-year period starting in 2005 and ending in 2007 and allowances issued in respect of those emissions. The first publication shall take place by 15 May 2017.';

(b) the following paragraph is inserted:

'4a. 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.'

The allowances cancelled pursuant to Article 3gb of Directive 2003/87/EC shall be considered as issued for the purposes of the calculation of the total number of allowances in circulation.';

(c) paragraphs 5 and 5a are replaced by the following:

'5. In any given year, if the total number of allowances in circulation is between 833 million and 1 096 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 1 096 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. By way of derogation from the second sentence of this subparagraph, until 31 December 2030, the percentage referred to in that sentence shall be doubled.

Without prejudice to the total number of allowances to be deducted pursuant to this paragraph, until 31 December 2030, allowances referred to in Article 10(2), first subparagraph, point (b), of Directive 2003/87/EC shall not be taken into account when determining Member States' shares contributing to that total amount.

5a. Unless otherwise decided in the first review carried out in accordance with Article 3, from 2023 allowances held in the reserve above 400 million allowances shall no longer be valid.'

(d) paragraph 7 replaced by the following:

'7. In any given year, if paragraph 6 of this Article is not applicable and the condition in Article 29a(1) of Directive 2003/87/EC has been met, 75 million allowances shall be released from the reserve and added to the quantity of allowances to be auctioned by the Member States under Article 10(2) of that Directive. Where fewer than 75 million allowances are in the reserve, all allowances in the reserve shall be released under this paragraph. Where the condition in Article 29a(1) of that Directive is met, the volumes to be released from the reserve in

accordance with that Article shall be evenly distributed during a period of three months, starting no later than two months from the date when the condition in Article 29a(1) of that Directive is met as notified by the Commission in accordance with the fourth subparagraph thereof.';

(2) the following Article is inserted:

'Article 1a

Operation of the market stability reserve for the buildings, road transport and additional sectors

1. Allowances covered by Chapter IVa of Directive 2003/87/EC shall be placed in and released from a separate section of the reserve established pursuant to Article 1 of this Decision, in accordance with the rules set out in this Article.

2. The placing of allowances in the reserve under this Article shall operate from 1 September 2028. The allowances covered by Chapter IVa of Directive 2003/87/EC shall be placed in, held in, and released from the reserve separately from the allowances covered by Article 1 of this Decision.

3. In 2027, the section referred to in paragraph 1 of this Article shall be created in accordance with Article 30d(2), second subparagraph, of Directive 2003/87/EC. From 1 January 2031, the allowances referred to in that subparagraph that have not been released from the reserve shall no longer be valid.

4. The Commission shall publish the total number of allowances in circulation covered by Chapter IVa of Directive 2003/87/EC each year, by 1 June of the subsequent year, separately from the number of allowances in circulation under Article 1(4) of this Decision. The total number of allowances in circulation under this Article in a given year shall be the cumulative number of allowances covered by that Chapter issued in the period since 1 January 2027, minus the cumulative tonnes of verified emissions covered by that Chapter for the period between 1 January 2027 and 31 December of that same given year and any allowances covered by that Chapter cancelled in accordance with Article 12(4) of Directive 2003/87/EC. The first publication shall take place by 1 June 2028.

5. In any given year, if the total number of allowances in circulation, as set out in the most recent publication as referred to in paragraph 4 of this Article, is above 440 million allowances, 100 million allowances shall be deducted from the quantity of allowances covered by Chapter IVa of Directive 2003/87/EC to be auctioned by the Member States under Article 30d of that Directive and shall be placed in the reserve over a period of 12 months beginning on 1 September of that year.

6. In any given year, if the total number of allowances in circulation is lower than 210 million, 100 million allowances covered by Chapter IVa of Directive 2003/87/EC shall be released from the reserve and added to the quantity of allowances covered by that Chapter to be auctioned by the Member States under Article 30d of that Directive. Where fewer than 100 million allowances are in the reserve, all allowances in the reserve shall be released under this paragraph.

7. The volumes to be released from the reserve in accordance with Article 30h of Directive 2003/87/EC shall be added to the quantity of allowances covered by Chapter IVa of that Directive to be auctioned by the Member States under Article 30d of that Directive. The volumes to be released from the reserve shall be evenly distributed over a period of three months, starting no later than two months after the date on which the conditions were met according to the publication in that regard in the *Official Journal of the European Union* pursuant to Article 30h(8) of Directive 2003/87/EC.

8. Article 1(8) and Article 3 of this Decision shall apply to the allowances covered by Chapter IVa of Directive 2003/87/EC.

9. By way of derogation from paragraphs 2, 3 and 4 of this Article, where one or both of the conditions referred to in Article 30k(1) of Directive 2003/87/EC are met, the placing of allowances in the reserve referred to in paragraph 2 of this Article shall operate from 1 September 2029 and the dates referred to in paragraphs 3 and 4 of this Article shall be put back by one year.';

(3) Article 3 is replaced by the following:

'Article 3

Review

The Commission shall monitor the functioning of the reserve in the context of the report provided for in Article 10(5) of Directive 2003/87/EC. That report should consider relevant effects on competitiveness, in particular in the industrial sector, including in relation to GDP, employment and investment indicators. Within three years of the start of the operation of the reserve and at five-year intervals thereafter, the Commission shall, on the basis of an analysis of the orderly functioning of the European carbon market, review the reserve and submit a legislative proposal, where appropriate, to the European Parliament and to the Council. Each review shall pay particular attention to the percentage figure for the determination of the number of allowances to be placed in the reserve pursuant to Article 1(5) of this Decision, the numerical value of the threshold for the total number of allowances in circulation, including with a view to a potential adjustment of that threshold in line with the linear factor referred to in Article 9 of Directive 2003/87/EC, as well as the number of allowances to be released from the reserve pursuant to Article 1(6) or (7) of this Decision. In its review, the Commission shall also look into the impact of the reserve on growth, jobs, and the Union's industrial competitiveness and on the risk of carbon leakage.'

Article 3

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Article 1 of this Directive by 31 December 2023. They shall apply those measures from 1 January 2024.

However, Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with the following articles by 30 June 2024:

- (a) Article 1, point (3), points (ae) to (ai), of this Directive;
- (b) Article 1, point (29), of this Directive with the exception of Article 30f(4) of Directive 2003/87/EC as inserted by that point; and
- (c) Article 1, point (31), of this Directive regarding Annexes III and IIIa to Directive 2003/87/EC as inserted by that point.

They shall immediately inform the Commission of the measures adopted in accordance with the first and second subparagraphs.

When Member States adopt those measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. 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

When complying with their obligation set out in Article 3(1) of this Directive, Member States shall ensure that their national legislation transposing Article 3, point (u), Article 10a(3) and (4), Article 10c(7) and Annex I, points 1 and 3, of Directive 2003/87/EC, in its version applicable on 4 June 2023, continue to apply until 31 December 2025. By way of derogation from Article 3(1), first subparagraph, last sentence, they shall apply their national measures transposing amendments to those provisions from 1 January 2026.

*Article 5***Entry into force and application**

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

Article 2 shall apply from 1 January 2024.

*Article 6***Addressees**

This Directive is addressed to the Member States.

Done at Strasbourg, 10 May 2023.

For the European Parliament
The President
R. METSOLA

For the Council
The President
J. ROSWALL

ANNEX

(1) Annex I to Directive 2003/87/EC is amended as follows:

(a) point 1 is replaced by the following:

'1. Installations or parts of installations used for research, development and testing of new products and processes are not covered by this Directive. Installations where during the preceding relevant five-year period referred to in Article 11(1), second subparagraph, emissions from the combustion of biomass that complies with the criteria set out pursuant to Article 14 contribute on average to more than 95 % of the total average greenhouse gas emissions are not covered by this Directive.';

(b) point 3 is replaced by the following:

'3. When the total rated thermal input of an installation is calculated in order to decide upon its inclusion in the EU ETS, the rated thermal inputs of all technical units which are part of it, in which fuels are combusted within the installation, shall be added together. Those units may include all types of boilers, burners, turbines, heaters, furnaces, incinerators, calciners, kilns, ovens, dryers, engines, fuel cells, chemical looping combustion units, flares, and thermal or catalytic post-combustion units. Units with a rated thermal input under 3 MW shall not be taken into account for the purposes of this calculation.';

(c) the table is amended as follows:

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

'Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste) From 1 January 2024, combustion of fuels in installations for the incineration of municipal waste with a total rated thermal input exceeding 20 MW, for the purposes of Articles 14 and 15.'	Carbon dioxide'
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(ii) the second row is replaced by the following:

'Refining of oil, where combustion units with a total rated thermal input exceeding 20 MW are operated'	Carbon dioxide'
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(iii) the fifth row is replaced by the following:

'Production of iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour'	Carbon dioxide'
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(iv) the seventh row is replaced by the following:

'Production of primary aluminium or alumina'	Carbon dioxide and perfluorocarbons'
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(v) the fifteenth row is replaced by the following:

'Drying or calcination of gypsum or production of plaster boards and other gypsum products, with a production capacity of calcined gypsum or dried secondary gypsum exceeding a total of 20 tonnes per day'	Carbon dioxide'
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(vi) the eighteenth row is replaced by the following:

'Production of carbon black involving the carbonisation of organic substances such as oils, tars, cracker and distillation residues with a production capacity exceeding 50 tonnes per day'	Carbon dioxide'
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(vii) the twenty-fourth row is replaced by the following:

'Production of hydrogen (H_2) and synthesis gas with a production capacity exceeding 5 tonnes per day'	Carbon dioxide'
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(viii) the twenty-seventh row is replaced by the following:

'Transport of greenhouse gases for geological storage in a storage site permitted under Directive 2009/31/EC, with the exclusion of those emissions covered by another activity under this Directive'	Carbon dioxide'
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(ix) the following row is added after the last new row, with a separation line in between:

'Maritime transport Maritime transport activities covered by Regulation (EU) 2015/757 with the exception of the maritime transport activities covered by Article 2(1a) and, until 31 December 2026, Article 2(1b) of that Regulation'	Carbon dioxide From 1 January 2026, methane and nitrous oxide'
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(2) Annex IIb to Directive 2003/87/EC is replaced by the following:

'ANNEX IIb

PART A

DISTRIBUTION OF FUNDS FROM THE MODERNISATION FUND CORRESPONDING TO ARTICLE 10(1), THIRD SUBPARAGRAPH

	Share
Bulgaria	5,84 %
Czechia	15,59 %
Estonia	2,78 %
Croatia	3,14 %
Latvia	1,44 %
Lithuania	2,57 %
Hungary	7,12 %
Poland	43,41 %
Romania	11,98 %
Slovakia	6,13 %

PART B

DISTRIBUTION OF FUNDS FROM THE MODERNISATION FUND CORRESPONDING TO ARTICLE 10(1), FOURTH SUBPARAGRAPH

	Share
Bulgaria	4,9 %
Czechia	12,6 %
Estonia	2,1 %
Greece	10,1 %
Croatia	2,3 %
Latvia	1,0 %
Lithuania	1,9 %
Hungary	5,8 %
Poland	34,2 %
Portugal	8,6 %
Romania	9,7 %
Slovakia	4,8 %
Slovenia	2,0 %;

(3) The following Annexes are inserted as Annexes III and IIIa to Directive 2003/87/EC:

'ANNEX III

ACTIVITY COVERED BY CHAPTER IVa

Activity	Greenhouse gases
Release for consumption of fuels which are used for combustion in the buildings, road transport and additional sectors. This activity shall not include: (a) the release for consumption of fuels used in the activities listed in Annex I, except if used for combustion in the activities of transport of greenhouse gases for geological storage as set out in the table, row twenty seven, of that Annex or if used for combustion in installations excluded under Article 27a; (b) the release for consumption of fuels for which the emission factor is zero; (c) the release for consumption of hazardous or municipal waste used as fuel. The buildings and road transport sectors shall correspond to the following sources of emissions, defined in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, with the necessary modifications to those definitions as follows: (a) Combined Heat and Power Generation (CHP) (source category code 1A1a ii) and Heat Plants (source category code 1A1a iii), insofar as they produce heat for categories under points (c) and (d) of this paragraph, either directly or through district heating networks; (b) Road Transportation (source category code 1A3b), excluding the use of agricultural vehicles on paved roads; (c) Commercial / Institutional (source category code 1A4a); (d) Residential (source category code 1A4b).	Carbon dioxide

Activity	Greenhouse gases
<p>Additional sectors shall correspond to the following sources of emissions, defined in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories:</p> <ul style="list-style-type: none"> (a) Energy Industries (source category code 1A1), excluding the categories defined under the second paragraph, point (a), of this Annex; (b) Manufacturing Industries and Construction (source category code 1A2). 	

ANNEX IIIa

ADJUSTMENT OF LINEAR REDUCTION FACTOR IN ACCORDANCE WITH ARTICLE 30c(2)

1. If the average emissions reported under Chapter IVa for the years 2024 to 2026 are more than 2 % higher compared to the value of the 2025 quantity defined in accordance with Article 30c(1), and if those differences are not due to the difference of less than 5 % between the emissions reported under Chapter IVa and the inventory data of 2025 Union greenhouse gas emissions from UNFCCC source categories for the sectors covered under Chapter IVa, the linear reduction factor shall be calculated by adjusting the linear reduction factor referred to in Article 30c(1).

2. The adjusted linear reduction factor in accordance with point 1 shall be determined as follows:

$LRF_{adj} = 100\% * [MRV_{[2024-2026]} - (ESR_{[2024]} - 6 * LRF_{[2024]} * ESR_{[2024]})] / (5 * MRV_{[2024-2026]})$, where,

LRF_{adj} is the adjusted linear reduction factor;

$MRV_{[2024-2026]}$ is the average of verified emissions under Chapter IVa for the years 2024 to 2026;

$ESR_{[2024]}$ is the value of 2024 emissions defined in accordance with Article 30c(1) for the sectors covered under Chapter IVa;

$LRF_{[2024]}$ is the linear reduction factor referred to in Article 30c(1).;

- (4) Annex IV to Directive 2003/87/EC is amended as follows:

- (a) in Part A, the section 'Calculation' is amended as follows:

- (i) in the third paragraph, the last sentence 'The emission factor for biomass shall be zero.' is replaced by the following:

'The emission factor for biomass that complies with the sustainability criteria 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, as set out in the implementing acts referred to in Article 14 of this Directive, shall be zero.';

- (ii) the fifth paragraph is replaced by the following:

'Default oxidation factors developed pursuant to Directive 2010/75/EU shall be used, unless the operator can demonstrate that activity-specific factors are more accurate.';

- (b) in Part B, section 'Monitoring of carbon dioxide emissions', fourth paragraph, the last sentence 'The emission factor for biomass shall be zero.' is replaced by the following:

'The emission factor for biomass that complies with the sustainability criteria 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, as set out in the implementing acts referred to in Article 14 of this Directive, shall be zero.';

(c) the following part is added:

'PART C

Monitoring and reporting of emissions corresponding to the activity referred to in Annex III

Monitoring of emissions

Emissions shall be monitored by calculation.

Calculation

Emissions shall be calculated using the following formula:

Fuel released for consumption × emission factor

Fuel released for consumption shall include the quantity of fuel released for consumption by the regulated entity.

Default IPCC emission factors, taken from the 2006 IPCC Inventory Guidelines or subsequent updates of those Guidelines, shall be used unless fuel-specific emission factors identified by independent accredited laboratories using accepted analytical methods are more accurate.

A separate calculation shall be made for each regulated entity, and for each fuel.

Reporting of emissions

Each regulated entity shall include the following information in its report:

A. Data identifying the regulated entity, including:

- name of the regulated entity;
- its address, including postcode and country;
- type of the fuels it releases for consumption and its activities through which it releases the fuels for consumption, including the technology used;
- address, telephone, fax and email details for a contact person; and
- name of the owner of the regulated entity, and of any parent company.

B. For each type of fuel released for consumption and which is used for combustion in the sectors referred to in Annex III, for which emissions are calculated:

- quantity of fuel released for consumption;
- emission factors;
- total emissions;
- end use(s) of the fuel released for consumption; and
- uncertainty.

Member States shall take measures to coordinate reporting requirements with any existing reporting requirements in order to minimise the reporting burden on businesses.;

(5) In Annex V to Directive 2003/87/EC, the following part is added:

'PART C

Verification of emissions corresponding to the activity referred to in Annex III

General Principles

1. Emissions corresponding to the activity referred to in Annex III shall be subject to verification.
2. The verification process shall include consideration of the report pursuant to Article 14(3) and of monitoring during the preceding year. It shall address the reliability, credibility and accuracy of monitoring systems and the reported data and information relating to emissions, and in particular:
 - (a) the reported fuels released for consumption and related calculations;

- (b) the choice and the employment of emission factors;
 - (c) the calculations leading to the determination of the overall emissions.
3. Reported emissions may only be validated if reliable and credible data and information allow the emissions to be determined with a high degree of certainty. A high degree of certainty requires the regulated entity to show that:
- (a) the reported data are free of inconsistencies;
 - (b) the collection of the data has been carried out in accordance with the applicable scientific standards; and
 - (c) the relevant records of the regulated entity are complete and consistent.
4. The verifier shall be given access to all sites and information in relation to the subject of the verification.
5. The verifier shall take into account whether the regulated entity is registered under the Union eco-management and audit scheme (EMAS).

Methodology

Strategic analysis

6. The verification shall be based on a strategic analysis of all the quantities of fuels released for consumption by the regulated entity. This requires the verifier to have an overview of all the activities through which the regulated entity is releasing the fuels for consumption and their significance for emissions.

Process analysis

7. The verification of the data and information submitted shall, where appropriate, be carried out on the site of the regulated entity. The verifier shall use spot-checks to determine the reliability of the reported data and information.

Risk analysis

8. The verifier shall submit all the means through which the fuels are released for consumption by the regulated entity to an evaluation with regard to the reliability of the data on the overall emissions of the regulated entity.

9. On the basis of this analysis the verifier shall explicitly identify any element with a high risk of error and other aspects of the monitoring and reporting procedure which are likely to contribute to errors in the determination of the overall emissions. This especially involves the calculations necessary to determine the level of the emissions from individual sources. Particular attention shall be given to those elements with a high risk of error and the abovementioned aspects of the monitoring procedure.

10. The verifier shall take into consideration any effective risk control methods applied by the regulated entity with a view to minimising the degree of uncertainty.

Report

11. The verifier shall prepare a report on the validation process stating whether the report pursuant to Article 14(3) is satisfactory. This report shall specify all issues relevant to the work carried out. A statement that the report pursuant to Article 14(3) is satisfactory may be made if, in the opinion of the verifier, the total emissions are not materially misstated.

Minimum competency requirement for the verifier

12. The verifier shall be independent of the regulated entity, carry out his or her activities in a sound and objective professional manner, and understand:

- (a) the provisions of this Directive, as well as relevant standards and guidance adopted by the Commission pursuant to Article 14(1);

- (b) the legislative, regulatory, and administrative requirements relevant to the activities being verified; and
 - (c) the generation of all information related to all the means through which the fuels are released for consumption by the regulated entity, in particular, relating to the collection, measurement, calculation and reporting of data.'
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